

SEARCH REQUEST FORM

Requestor's Name: _____ Serial Number: _____
Date: _____ Phone: _____ Art Unit: _____

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

STAFF USE ONLY

Date completed: 03-17-03

Searcher: Beverly C 4999

Terminal time: 22

Elapsed time: _____

CPU time: _____

Total time: 23

Number of Searches: _____

Number of Databases: 1

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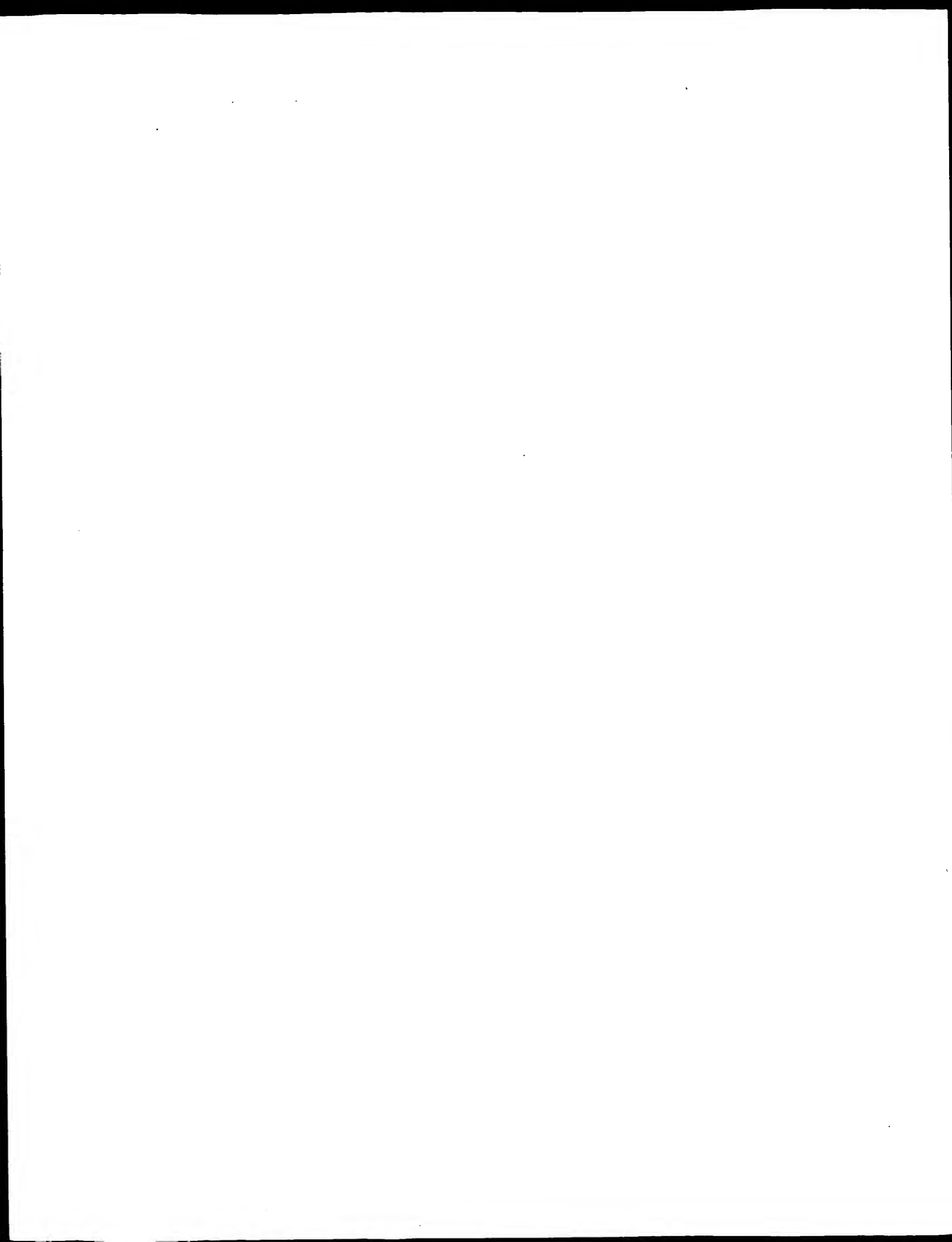
____ STIC
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____ Pre-S

Type of Search

____ N.A. Sequence
____ A.A. Sequence
____ Structure
____ Bibliographic

Vendors

____ IG Suite
____ STN
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____ APS
____ Geninfo
____ SDC
____ DARC/Questel
____ Other CGN



GenCore version 5.1.4_p5_4578
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OM nucleic - nucleic search, using sw model

Run on: March 14, 2003, 08:46:58 ; Search time 8468 Seconds
(without alignments)
12306.992 Million cell updates/sec

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Scoring table: OLIGO_NNC
Gap 60.0 , Gapext 60.0

Searched: 24791104 seqs, 12571243825 residues

Word size : 50

Total number of hits satisfying chosen parameters: 224

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Post-processing: Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	4145	100.0	4145	1 PCT-US01-01381A-10	Sequence 10, Appli
3	4145	100.0	4145	10 US-08-630-798-1	Sequence 1, Appli
4	4145	100.0	4145	15 US-09-053-375B-110	Sequence 110, App
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6	4145	100.0	4145	18 US-09-440-302B-724	Sequence 724, App
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8	4145	100.0	4145	18 US-09-442-589B-758	Sequence 758, App
9	4145	100.0	4145	18 US-09-490-208-3	Sequence 3, Appli
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11	4145	100.0	4145	21 US-09-543-679A-2507	Sequence 2507, Ap
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15	4145	100.0	9513	21 US-09-543-679A-2509	Sequence 2509, Ap
16	4145	100.0	35459	21 US-09-543-679A-3003	Sequence 3003, Ap
17	3482	84.0	4164	14 US-09-023-655-1407	Sequence 1407, Ap
18	3458	83.4	4070	1 PCT-US97-07643-1	Sequence 1, Appli
19	3381	81.6	4062	14 US-09-016-434-1478	Sequence 1478, Ap
20	3357	81.0	4150	18 US-09-469-519-37	Sequence 37, Appli
21	3357	81.0	4150	22 US-09-597-984-3	Sequence 3, Appli

22	3327	80.3	3946	22	US-09-597-984-2	Sequence 2, Appl1	95	165	4.0	250	42	US-10-203-136-19076	Sequence 19076, A
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27	2652	64.0	3460	27	US-60-213-248-45	Sequence 45, Appl	100	165	4.0	483	41	US-10-182-993-5713	Sequence 5713, Ap
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QY	901	GTTACTCCACCAACAATGGGACCATCATAGGTTCGGCCATCATCCGTTGTTCCCGACGGAGATG	960
Db	901	GTTACTCCACCAACAATGGGACCATCATAGGTTCGGCCATCATCCGTTGTTCCCGACGGAGATG	960
QY	961	ATGCGAAGCACGACCTTCGGGTGTGGAATGCTCAGCTCATCCGTTATGCTGGCTAACAGA	1020
Db	961	ATGCGAAGCACGACCTTCGGGTGTGGAATGCTCAGCTCATCCGTTATGCTGGCTAACAGA	1020
QY	1021	TGCGAGATGGAGCATATGAGGAGGACCCCTGCCAAGCTGGAAATTCACATAGCTGTGCATCG	1080
Db	1021	TGCGAGATGGAGCATATGAGGAGGACCCCTGCCAAGCTGGAAATTCACATAGCTGTGCATCG	1080
QY	1081	ACCTGGGCTGGAAAGCCCCCAAGTACGAGGCGGCTGCAATGAGTGGTCCCGCTGGTCTCGAGGCCA	1140
Db	1081	ACCTGGGCTGGAAAGCCCCCAAGTACGAGGCGGCTGCAATGAGTGGTCCCGCTGGTCTCGAGGCCA	1140
QY	1141	ATGGCCGTGACCCCTGACCTCTTGGAATCCCAACCTGACCTTGCTGTATAGGTGGCCATCG	1200
Db	1141	ATGGCCGTGACCCCTGACCTCTTGGAATCCCAACCTGACCTTGCTGTATAGGTGGCCATCG	1200
QY	1201	AACATGCCCAATAAGATGAGTGGTTTCGGGAACTGAGGTAAAGTGGTAGCCCTCGCTTCGAC	1260
Db	1201	AACATGCCCAATAAGATGAGTGGTTTCGGGAACTGAGGTAAAGTGGTAGCCCTCGCTTCGAC	1260
QY	1261	TGCGCCACATATGCTCTTGAGGTGGGCGGCTGGAGTGTCCCAAGGTTGCCCTTTCATATGCT	1320
Db	1261	TGCGCCACATATGCTCTTGAGGTGGGCGGCTGGAGTGTCCCAAGGTTGCCCTTTCATATGCT	1320
QY	1321	GGTACATATGGGACACAGAGATGGAGTCCGGGACTTGTGACGCTCCAGCGCTAACAAATCC	1380
Db	1321	GGTACATATGGGACACAGAGATGGAGTCCGGGACTTGTGACGCTCCAGCGCTAACAAATCC	1380
QY	1381	TGGAGGAAGTGGGACGAGAGAATGGGCTTGGAAACGCACAAGCTGGCTGTGCTTGGAAAG	1440
Db	1381	TGGAGGAAGTGGGACGAGAGAATGGGCTTGGAAACGCACAAGCTGGCTGTGCTTGGAAAG	1440
QY	1441	ACCAGGCTGTGCTGGAATATCAATGCTGTGATTCATATGTTTTCAGAAAGCAGATATGTA	1500
Db	1441	ACCAGGCTGTGCTGGAATATCAATGCTGTGATTCATATGTTTTCAGAAAGCAGATATGTA	1500
QY	1501	CCATCATGAGCACCACTCGGCTGCAAGAACTCTTCATGAAAGTACATGCGAATGAAATACC	1560
Db	1501	CCATCATGAGCACCACTCGGCTGCAAGAACTCTTCATGAAAGTACATGCGAATGAAATACC	1560
QY	1561	GATCCCGTGGGGGGTGGCCCGGACAGCTGGAAATTTGGGTGGGTCCTCCATGCTGTGGAGACA	1620
Db	1561	GATCCCGTGGGGGGTGGCCCGGACAGCTGGAAATTTGGGTGGGTCCTCCATGCTGTGGAGACA	1620
QY	1621	TCACCCCGGTGTTTCACACAGAGATGCTGAACATAGCTGTCGTCCTTCTACTACTATC	1680
Db	1621	TCACCCCGGTGTTTCACACAGAGATGCTGAACATAGCTGTCGTCCTTCTACTACTATC	1680
QY	1681	AGGTAGAGAGCTTGGAAAAACCATATGCTGTGAGAGACAGAAAGGGAGACCCACAGAAAGAG	1740
Db	1681	AGGTAGAGAGCTTGGAAAAACCATATGCTGTGAGAGACAGAAAGGGAGACCCACAGAAAGAG	1740
QY	1741	AGATTCACATTAAGATGTTGGTCAAACTGTGCTCTTGGCTGTATGCTGTGATGAGCCACAGA	1800
Db	1741	AGATTCACATTAAGATGTTGGTCAAACTGTGCTCTTGGCTGTATGCTGTGATGAGCCACAGA	1800
QY	1801	CAATGGCTGCCGATGAGATGCAACATCCTCTTTCGACAGAGACAGGAAATATCAGAGG	1860
Db	1801	CAATGGCTGCCGATGAGATGCAACATCCTCTTTCGACAGAGACAGGAAATATCAGAGG	1860
QY	1861	CGCTGGCTGGAGCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGGTTGCTCTGCA	1920
Db	1861	CGCTGGCTGGAGCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGGTTGCTCTGCA	1920

QY	1921	TGATAAGTACAGGCTGAGCTGCTCTGGAGAGAGAACGGCTGCTGTGTGGTGGTACACAGTA	1980
Db	1921	TGATAAGTACAGGCTGAGCTGCTGGAGAGAGAACGGCTGCTGTGTGGTGGTACACAGTA	1980
QY	1981	CGTTTGGCATAATGAGACATGGCCCTGGCCAAATGGAGAGAACTGAAAGAAATCGCTCTTCAATGC	2040
Db	1981	CGTTTGGCATAATGAGACATGGCCCTGGCCAAATGGAGAGAACTGAAAGAAATCGCTCTTCAATGC	2040
QY	2041	TGAAGAGCTCACACACAAATTAGGTACGCTGTGTTTGGCTGGGCTCCAGCATGTAC	2100
Db	2041	TGAAGAGCTCACACACAAATTAGGTACGCTGTGTTTGGCTGGGCTCCAGCATGTAC	2100
QY	2101	CTCGATCTGGGCTTGGCTGCATGACATTTGATCAGAAAGCTGTCCCACTGGGGGCTCTC	2160
Db	2101	CTCGATCTGGGCTTGGCTGCATGACATTTGATCAGAAAGCTGTCCCACTGGGGGCTCTC	2160
QY	2161	AGCTACCCCGAGTGGAGAAAGGGGATGAGCTCAGTGGGAGAGACAGCCCTTCCGACGT	2220
Db	2161	AGCTACCCCGAGTGGAGAAAGGGGATGAGCTCAGTGGGAGAGACAGCCCTTCCGACGT	2220
QY	2221	GGGCGGTGCAAACTTTCAGAGGACCGCTGTGAGACGTTTATCTCGAGAGCAACAGACA	2280
Db	2221	GGGCGGTGCAAACTTTCAGAGGACCGCTGTGAGACGTTTATCTCGAGAGCAACAGACA	2280
QY	2281	TTTCAGATCCCCAAGCTCTACACCTCCGAAATGTGACCTGGAGCCGACACATCAAGGCTCG	2340
Db	2281	TTTCAGATCCCCAAGCTCTACACCTCCGAAATGTGACCTGGAGCCGACACATCAAGGCTCG	2340
QY	2341	TGCAGAGCTACAGCCTTTTGGAGCTCAGCAAAACCCCTCAGCAGCATGATGCAAGAACG	2400
Db	2341	TGCAGAGCTACAGCCTTTTGGAGCTCAGCAAAACCCCTCAGCAGCATGATGCAAGAACG	2400
QY	2401	TGTTTACCATTAGAGGCTCAAAATCTCGCAGATCTACAAAGTCCGACATCCAGCCGTGCA	2460
Db	2401	TGTTTACCATTAGAGGCTCAAAATCTCGCAGATCTACAAAGTCCGACATCCAGCCGTGCA	2460
QY	2461	CCATCTGTGTGGAACTCTCCTGTGAGAGATGGCCAAAGCCCTGAAATCTGGCCGGGGAGAGC	2520
Db	2461	CCATCTGTGTGGAACTCTCCTGTGAGAGATGGCCAAAGCCCTGAAATCTGGCCGGGGAGAGC	2520
QY	2521	ACCTTGGGGTTTGGCCAGGCAACGAGCGGCGCTGTGTCCAAGGACATCTGGAAGCGAGTGG	2580
Db	2521	ACCTTGGGGTTTGGCCAGGCAACGAGCGGCGCTGTGTCCAAGGACATCTGGAAGCGAGTGG	2580
QY	2581	TGGATGGCCCCACACCCCCACAGACAGATGGCTGGAAGAGACTGGATGAGATGGACACT	2640
Db	2581	TGGATGGCCCCACACCCCCACAGACAGATGGCTGGAAGAGACTGGATGAGATGGACACT	2640
QY	2641	ACTGGTCAATGAGCAAAAGAGGTGGCCCTGCTGCTACATCAGCCAGGCGCCCACTACTCC	2700
Db	2641	ACTGGTCAATGAGCAAAAGAGGTGGCCCTGCTGCTACATCAGCCAGGCGCCCACTACTCC	2700
QY	2701	CGGACATCACCAACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCAGGTGGCCACAG	2760
Db	2701	CGGACATCACCAACCCCCAACCCAGCTGCTGCTCCAAAAGCTGGCCAGGTGGCCACAG	2760
QY	2761	AAGACCCGAGACAGACAGAGGTGGAGGCCCTGTGGCAAGCCCTCAGAGTACACAGTGGGA	2820
Db	2761	AAGACCCGAGACAGACAGAGGTGGAGGCCCTGTGGCAAGCCCTCAGAGTACACAGTGGGA	2820
QY	2821	AGTTTACCACAAAGGCCCAACATTCCTGGAGGTGTAGAGAGATTCCGCTCCCTGCGGGTGT	2880
Db	2821	AGTTTACCACAAAGGCCCAACATTCCTGGAGGTGTAGAGAGATTCCGCTCCCTGCGGGTGT	2880
QY	2881	CTGCTGGCTTCCCTGCTTCCCAAGCTCCCAATTTCTGAAGCCCAAGTTCTACTCATACACT	2940
Db	2881	CTGCTGGCTTCCCTGCTTCCCAAGCTCCCAATTTCTGAAGCCCAAGTTCTACTCATACACT	2940
QY	2941	CTTCCCGGAGTACACGCGCCACGAGATTCACCTGACTGTGGGCGGTGTACCTACACACA	3000
Db	2941	CTTCCCGGAGTACACGCGCCACGAGATTCACCTGACTGTGGGCGGTGTACCTACACACA	3000
QY	3001	CCGAGATGGCCAGGTTCCCTGTCACACAGGTTCTTGCACACATAGCTTCAACAGCTTGA	3060

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 Db 3001 CCGGAGATGGCCAGGAGGTCCTGACACACGATGTCACACATGAGCTCAACAGCTGA 3060
 QY 3061 AGCCCCAAGACCCAGTGGCTGCTTGGGGATGCGACGGCTTCCACTCCCGAGG 3120
 Db 3061 AGCCCCAAGACCCAGTGGCTGCTTGGGGATGCGACGGCTTCCACTCCCGAGG 3120
 QY 3121 ATCCCTCCATCCCTGATGATCATGAGGAGCTGACAGGATGAGCTTCCGAGTT 3180
 Db 3121 ATCCCTCCATCCCTGATGATCATGAGGAGCTGACAGGATGAGCTTCCGAGTT 3180
 QY 3181 TCTGGCAGCAAGGCTTCCATGACTCCAGCACAAGGAGTGGGGAGGCGCATGACT 3240
 Db 3181 TCTGGCAGCAAGGCTTCCATGACTCCAGCACAAGGAGTGGGGAGGCGCATGACT 3240
 QY 3241 TGGGTTGGGTGGCGCGCCGAGATGAGGACCAATCTCCAGGAGGAGATCTTGAGA 3300
 Db 3241 TGGGTTGGGTGGCGCGCCGAGATGAGGACCAATCTCCAGGAGGAGATCTTGAGA 3300
 QY 3301 TGGCCCAAGAAAGGGGTGCTCATGCGGTGCACACAGCTATTCCTCCCTGCGCAGC 3360
 Db 3301 TGGCCCAAGAAAGGGGTGCTCATGCGGTGCACACAGCTATTCCTCCCTGCGCAGC 3360
 QY 3361 CCAAGGCTATGTTCAAGACATCTGCGGACAGCTGGCCAGCGAGTGTCTCGTGC 3420
 Db 3361 CCAAGGCTATGTTCAAGACATCTGCGGACAGCTGGCCAGCGAGTGTCTCGTGC 3420
 QY 3421 TCCACAGAGGACGAGGACCTTATGTTGGGGATGTCGCCATGCGCCGAGAGCTGG 3480
 Db 3421 TCCACAGAGGACGAGGACCTTATGTTGGGGATGTCGCCATGCGCCGAGAGCTGG 3480
 QY 3481 CCCACACCCCTGAAGACAGTGGTGGCTGCCAAGCTGAATTAATGAGAGCAGTGCAG 3540
 Db 3481 CCCACACCCCTGAAGACAGTGGTGGCTGCCAAGCTGAATTAATGAGAGCAGTGCAG 3540
 QY 3541 ACTATTTCTTCAAGCTCAGAGGCGCAGAGCGCTATCAGCAGATATCTTGGTGTAT 3600
 Db 3541 ACTATTTCTTCAAGCTCAGAGGCGCAGAGCGCTATCAGCAGATATCTTGGTGTAT 3600
 QY 3601 TTCTCTACGAGGAGAAAGAGACAGGAGTGGCGGTGACAGCCACAGCTGGAGATGTCAG 3660
 Db 3601 TTCTCTACGAGGAGAAAGAGACAGGAGTGGCGGTGACAGCCACAGCTGGAGATGTCAG 3660
 QY 3661 CGCTCTGAGGGCTACAGAGAGGGGTTAAAGCTGCCGACAGAACTTAAGATGAGGCA 3720
 Db 3661 CGCTCTGAGGGCTACAGAGAGGGGTTAAAGCTGCCGACAGAACTTAAGATGAGGCA 3720
 QY 3721 GCTCTGATATCTGAGGTACAGGAGGCTGGGAGATGAGAGAAATGATATCCCGAGC 3780
 Db 3721 GCTCTGATATCTGAGGTACAGGAGGCTGGGAGATGAGAGAAATGATATCCCGAGC 3780
 QY 3781 CTCAGCTTATTTCTTCAAGCTTGTCCCATCAAGCCCTTACTTGAATCTTAACAA 3840
 Db 3781 CTCAGCTTATTTCTTCAAGCTTGTCCCATCAAGCCCTTACTTGAATCTTAACAA 3840
 QY 3841 GTAGCAACCTGAGATGAGAGGCTCTCTCAAACTGGGGCTCCCTGGTCCCTTGG 3900
 Db 3841 GTAGCAACCTGAGATGAGAGGCTCTCTCAAACTGGGGCTCCCTGGTCCCTTGG 3900
 QY 3901 AGCAAAATCTTAAATGAGGAGGCTGGCAGAGTGGTGAAGATGAACTTGTCTGAGT 3960
 Db 3901 AGCAAAATCTTAAATGAGGAGGCTGGCAGAGTGGTGAAGATGAACTTGTCTGAGT 3960
 QY 3961 GCACCACTTCAAGTACACAGAGAGTCTATGCAACACTGTGATTAATTAATGCTTGG 4020
 Db 3961 GCACCACTTCAAGTACACAGAGAGTCTATGCAACACTGTGATTAATTAATGCTTGG 4020
 QY 4021 TGTACGATTAATTAATGCTTGTATTAATAAACTAACACAGCTGTGTTCCCATGGCC 4080
 Db 4021 TGTACGATTAATTAATGCTTGTATTAATAAACTAACACAGCTGTGTTCCCATGGCC 4080
 QY 4081 ACTTGGGCTTCCCTGATGATTCCTTGAATGAGATATTTAATGAATTTGATTTACTT 4140
 Db 4081 ACTTGGGCTTCCCTGATGATTCCTTGAATGAGATATTTAATGAATTTGATTTACTT 4140

Db 4081 ACTTGGGCTTCCCTGATGATTCCTTGAATGAGATATTTAATGAATTTGATTTACTT 4140
 QY 4141 TAATC 4145
 Db 4141 TAATC 4145
 RESULT 2
 PCT-US01-01381A-10
 ; Sequence 10, Application PC/TU0101381A
 ; GENERAL INFORMATION:
 ; APPLICANT: Isis Pharmaceuticals, Inc.
 ; APPLICANT: C. Frank Bennett
 ; APPLICANT: Nicholas M. Dean
 ; APPLICANT: Lex M. Cowsett
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC OXIDE SYNTHASE
 ; FILE REFERENCE: RUSP-0098
 ; CURRENT FILING DATE: 2001-01-16
 ; PRIOR FILING DATE: 2000-01-24
 ; NUMBER OF SEQ ID NOS: 182
 ; SEQ ID NO 10
 ; LENGTH: 4145
 ; TYPE: DNA
 ; ORGANISM: Mus musculus
 ; FEATURE:
 ; NAME/KEY: mRNA
 ; LOCATION: (1)...(4110)
 PCT-US01-01381A-10

Query Match 100.0%; Score 4145; DB 1; Length 4145;
 Best local Similarity 100.0%; Pred. No. 0;
 Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CTGCTTTAAATCTCTCGCCACCTTTGATGAGGAGGAGTGGCAAGTTCTAGACAGTCCG 60
 Db 1 CTGCTTTAAATCTCTCGCCACCTTTGATGAGGAGGAGTGGCAAGTTCTAGACAGTCCG 60
 QY 61 AAGTTCTCAAGGACAGGCTCTCTCTGTTGACTGTCTTACCCGCGGAGGAGGAGTGC 120
 Db 61 AAGTTCTCAAGGACAGGCTCTCTCTGTTGACTGTCTTACCCGCGGAGGAGGAGTGC 120
 QY 121 AGCCAGCTGCAAGCCCGCAGTGAAGAACATCTGAGCTCAATCAATCAATGATGACATTA 180
 Db 121 AGCCAGCTGCAAGCCCGCAGTGAAGAACATCTGAGCTCAATCAATCAATGATGACATTA 180
 QY 181 GTGACCTGCTTGTAAAGCCATAGAGATGAGCTGTCTTGAATTTCTGTTCAAGACA 240
 Db 181 GTGACCTGCTTGTAAAGCCATAGAGATGAGCTGTCTTGAATTTCTGTTCAAGACA 240
 QY 241 AATTCCACCATGATGCAATGAAATGGGAAAAAGACATCAACAAATGTGAGAAAGCCC 300
 Db 241 AATTCCACCATGATGCAATGAAATGGGAAAAAGACATCAACAAATGTGAGAAAGCCC 300
 QY 301 CCGTGGCACCCTCCAGTCCAGTGAACAGAGTGAACCTTCAATCAACAACTCGACAGC 360
 Db 301 CCGTGGCACCCTCCAGTCCAGTGAACAGAGTGAACCTTCAATCAACAACTCGACAGC 360
 QY 361 AGCAGAAATGAGTCCCGCAGGCGCTCTGTGAGAGAGGGAAGAAATCTCCAGAAATCTTGG 420
 Db 361 AGCAGAAATGAGTCCCGCAGGCGCTCTGTGAGAGAGGGAAGAAATCTCCAGAAATCTTGG 420
 QY 421 TCAAGCTGATGCAACCCATTTGCTCCCGCAGGAGTGAAGATCAAAAACTGGGGCA 480
 Db 421 TCAAGCTGATGCAACCCATTTGCTCCCGCAGGAGTGAAGATCAAAAACTGGGGCA 480
 QY 481 GCGGATGATCTTCCAGAGACACTTCAACATTAAGGCAAAAGGATTTTAATTTGAGGT 540
 Db 481 GCGGATGATCTTCCAGAGACACTTCAACATTAAGGCAAAAGGATTTTAATTTGAGGT 540
 QY 541 CCAATCTTGGCTGAGTCAATTAATGACTCCCAAAAGTTGACACAGAGCAGGAGACA 600

Db	541	CCAAATCTTGCTGGGGTCCATTATGACCCCAAAAGTTTGACACGAGAGACCAGGACGACA	600
Qy	601	AGCCTAACCCCTCCAGATGAGCTTACCTCAAGCATGATGAAATTTCTCAACCAATATTACG	660
Db	601	AGCCTAACCCCTCCAGATGAGCTTACCTCAAGCATGATGAAATTTCTCAACCAATATTACG	660
Qy	661	GCTCTTCAAGAGGCAAAATATAGAGAAACATCTGGCCAGGATGGAGCGGTAAACAAAG	720
Db	661	GCTCTTCAAGAGGCAAAATATAGAGAAACATCTGGCCAGGATGGAGCGGTAAACAAAG	720
Qy	721	AGATGAAACAACAGAGAACCTACCACTGACGGAGATGAGCTCATCTTCGACCAACAGC	780
Db	721	AGATGAAACAACAGAGAACCTACCACTGACGGAGATGAGCTCATCTTCGACCAACAGC	780
Qy	781	AGGCGCTGGGCAATGCCCCAGAGCTGATGGGAGATCCAGTGGTCCAACTCCAGAGCT	840
Db	781	AGGCGCTGGGCAATGCCCCAGAGCTGATGGGAGATCCAGTGGTCCAACTCCAGAGCT	840
Qy	841	TCGATGCCCCGAGCTGTTCCACTGCCCCGGGAAATGTTTGAACACATCTGCAGACAGCTGC	900
Db	841	TCGATGCCCCGAGCTGTTCCACTGCCCCGGGAAATGTTTGAACACATCTGCAGACAGCTGC	900
Qy	901	GTTACTCCACCAATATGCAATCATGAGTGGCCATCACGCTGTTCCCCAGCGGATG	960
Db	901	GTTACTCCACCAATATGCAATCATGAGTGGCCATCACGCTGTTCCCCAGCGGATG	960
Qy	961	ATGCAAGACAGACTTCCGGGTGGGAATGCTCAGCTCCGCTATGCTGGCTACCCAGA	1020
Db	961	ATGCAAGACAGACTTCCGGGTGGGAATGCTCAGCTCCGCTATGCTGGCTACCCAGA	1020
Qy	1021	TCGCAGATGAGCATCAGAGGGAGACCTGCCACGTGGAATTCACCTGAGCTGTCATGC	1080
Db	1021	TCGCAGATGAGCATCAGAGGGAGACCTGCCACGTGGAATTCACCTGAGCTGTCATGC	1080
Qy	1081	ACCTGGGCTGGAAAGCCCAAGTACGGCCGCTTGATGTGCTCCCGTGGCTGCAGAGCA	1140
Db	1081	ACCTGGGCTGGAAAGCCCAAGTACGGCCGCTTGATGTGCTCCCGTGGCTGCAGAGCA	1140
Qy	1141	ATGCGCGTACCTGAGCTCTTCAAAATCCACCTGACCTTGTGCTTGAAGTGGCCATGC	1200
Db	1141	ATGCGCGTACCTGAGCTCTTCAAAATCCACCTGACCTTGTGCTTGAAGTGGCCATGC	1200
Qy	1201	AACATCCCAAAATGCAAGTGTGTTGGGAACTGAGCTAAAGTGTGTAAGCCCTGCTGAG	1260
Db	1201	AACATCCCAAAATGCAAGTGTGTTGGGAACTGAGCTAAAGTGTGTAAGCCCTGCTGAG	1260
Qy	1261	TGGCCAAATGCTGCTTGAAGTGGGGGCGCTGGAGTCCAGAGGTGCCCTTCATAGGCT	1320
Db	1261	TGGCCAAATGCTGCTTGAAGTGGGGGCGCTGGAGTCCAGAGGTGCCCTTCATAGGCT	1320
Qy	1321	GGTACATGGGCAAGAGATCGAGTCCGGAGCTTCTGTAGCTCCAGCGCTCAACATCC	1380
Db	1321	GGTACATGGGCAAGAGATCGAGTCCGGAGCTTCTGTAGCTCCAGCGCTCAACATCC	1380
Qy	1381	TGGAGAGTGGGCAAGAGATGGGCTGGAACGACAACTGGCTGCTGGAAG	1440
Db	1381	TGGAGAGTGGGCAAGAGATGGGCTGGAACGACAACTGGCTGCTGGAAG	1440
Qy	1441	ACCAAGCTGCTGTTGAGATCAACATGCTGATCATGTTTGAAGAGCAAGATGTGA	1500
Db	1441	ACCAAGCTGCTGTTGAGATCAACATGCTGATCATGTTTGAAGAGCAAGATGTGA	1500
Qy	1501	CCATCTATGACACACACTGCTGGTGCAGAACTCTTCATGCAAGTACATGCAATGAATAC	1560
Db	1501	CCATCTATGACACACACTGCTGGTGCAGAACTCTTCATGCAAGTACATGCAATGAATAC	1560
Qy	1561	GGTCCCTGGGGGCTGCCGAGAGCTGATTTGGCTGCTCCCTCCATGCTGGAGCA	1620
Db	1561	GGTCCCTGGGGGCTGCCGAGAGCTGATTTGGCTGCTCCCTCCATGCTGGAGCA	1620
Qy	1621	TCACCCCGTGTTCACGAGAGATGCTAAGTCTGCTGCTCCCTTCTACTACTATC	1680
Db	1621	TCACCCCGTGTTCACGAGAGATGCTAAGTCTGCTGCTCCCTTCTACTACTATC	1680
Qy	1681	AGGTAGAGGCTGGAAAAACCATGTCTGGCAGAGCAGAAAGCGGAGACCAAGAGAG	1740
Db	1681	AGGTAGAGGCTGGAAAAACCATGTCTGGCAGAGCAGAAAGCGGAGABACCAAGAGAG	1740
Qy	1741	AGATTCATTGAAAGTCTTGTCAAAAGCTGTCTTGTGCTGTATGCTGATGCGCAGA	1800
Db	1741	AGATTCATTGAAAGTCTTGTCAAAAGCTGTCTTGTGCTGTATGCTGATGCGCAGA	1800
Qy	1801	CAATGGGCTCCCGAGTACAGTCAACATCTCTTTCGACAGAGACAGAAAAATCAGAG	1860
Db	1801	CAATGGGCTCCCGAGTACAGTCAACATCTCTTTCGACAGAGACAGAAAAATCAGAG	1860
Qy	1861	CGCTGGCTGGAGCTGGGGGCTTATTCAGTGTGCTTCAACCCCAAGTGTGTGCA	1920
Db	1861	CGCTGGCTGGAGCTGGGGGCTTATTCAGTGTGCTTCAACCCCAAGTGTGTGCA	1920
Qy	1921	TGATTAAGTACAGGCTGAGCTGCTGGAGAGGAGAGAGGCTGTTGTGTGACCACTA	1980
Db	1921	TGATTAAGTACAGGCTGAGCTGCTGGAGAGGAGAGAGGCTGTTGTGTGACCACTA	1980
Qy	1981	CGTTGGCAATGAGAGACTGCGCTGGCAATGAGAGAAACTGAGAAATGCTCTCATGC	2040
Db	1981	CGTTGGCAATGAGAGACTGCGCTGGCAATGAGAGAAACTGAGAAATGCTCTCATGC	2040
Qy	2041	TGAAGAGCTCAACAAATTCAGAGTACGCTGTTTGGCTCGGCTCCAGCATGACC	2100
Db	2041	TGAAGAGCTCAACAAATTCAGAGTACGCTGTTTGGCTCGGCTCCAGCATGACC	2100
Qy	2101	CTGGGTTCTGGCTTTTGTCTATGACATTTATATGAAAGCTGTCCACCTGGGGCTCTC	2160
Db	2101	CTGGGTTCTGGCTTTTGTCTATGACATTTATATGAAAGCTGTCCACCTGGGGCTCTC	2160
Qy	2161	AGCTCACCCGATGGAGAGGGATGAGCTCACTGTTGGGCGAGAGAGCTTCCGAGCT	2220
Db	2161	AGCTCACCCGATGGAGAGGGATGAGCTCACTGTTGGGCGAGAGAGCTTCCGAGCT	2220
Qy	2221	GGGCGGTGCAAACTTCAAGGCAAGCTGTGAGAGCTTGTATGTCGAGGCAACACACA	2280
Db	2221	GGGCGGTGCAAACTTCAAGGCAAGCTGTGAGAGCTTGTATGTCGAGGCAACACACA	2280
Qy	2281	TTTCAGATCCCAAGCTCTTACACCTGCAATGTGACTGGGACCGCACCTACAGGCTCG	2340
Db	2281	TTTCAGATCCCAAGCTCTTACACCTGCAATGTGACTGGGACCGCACCTACAGGCTCG	2340
Qy	2341	TGCAGACTCAGAGCTTTTGGACTTGCAGAAAGCCTCAGACAGATGATGCCAAAGG	2400
Db	2341	TGCAGACTCAGAGCTTTTGGACTTGCAGAAAGCCTCAGACAGATGATGCCAAAGG	2400
Qy	2401	TGTTACCATGAGGCTCAAACTCTCGGAGATGTACAAAGTCCGACATCCAGCGTGGCA	2460
Db	2401	TGTTACCATGAGGCTCAAACTCTCGGAGATGTACAAAGTCCGACATCCAGCGTGGCA	2460
Qy	2461	CCATCTCTGTGGAATCTCTCTGTGAGATGGCCAAAGGCTGAACTACTCTCCGGGAGC	2520
Db	2461	CCATCTCTGTGGAATCTCTCTGTGAGATGGCCAAAGGCTGAACTACTCTCCGGGAGC	2520
Qy	2521	ACCTTGGGTTTGGCCAGGCAACAGCGGCGCTTGGTCCAAAGCATCTGAGAGCTGG	2580
Db	2521	ACCTTGGGTTTGGCCAGGCAACAGCGGCGCTTGGTCCAAAGCATCTGAGAGCTGG	2580
Qy	2581	TGATGAGCCCGACACCCACACAGACAGTGGCTGAGAGACCTGATGAGATGGAGCT	2640
Db	2581	TGATGAGCCCGACACCCACACAGACAGTGGCTGAGAGACCTGATGAGATGGAGCT	2640
Qy	2641	ACTGGGTGAGTGAACAAGGCTGCCCCCTGTCTACTACACAGGCGCTTACTACTCC	2700
Db	2641	ACTGGGTGAGTGAACAAGGCTGCCCCCTGTCTACTACACAGGCGCTTACTACTCC	2700
Qy	2701	CGGACATCACACACCCCAACCCAGTGTGCTCCAAAGCTGGGCGAGGTGGCCACAG	2760
Db	2701	CGGACATCACACACCCCAACCCAGTGTGCTCCAAAGCTGGGCGAGGTGGCCACAG	2760

QY	3841	GTACACCTTGATTGATTCGGACCTCTCTCTCAACGTGGGGCCCTCGTCCCTTGG	3900
Db	3841	GTAGACCTCGATTGATTCGAGACCTCTCTCTCAACGTGGGGCCCTCGTCCCTTGG	3900
QY	3901	AGACAAATCTTAAATCCAGGCTGGCCAGTGGTGAAAGATGGAATCTGCTGAGT	3960
Db	3901	AGACAAATCTTAAATCCAGGCTGGCCAGTGGTGAAAGATGGAATCTGCTGAGT	3960
QY	3961	GCACCATTCAAGTACACACAGAGAGTGTATCGCACACATGTGATTAATCACTCCATG	4020
Db	3961	GCACCATTCAAGTACACACAGAGAGTGTATCGCACACATGTGATTAATCACTCCATG	4020
QY	4021	TGTACAGTATTTATGCTCTGTATTTAAAAAACTAACCCAGTCTGTTCCTCATGGCC	4080
Db	4021	TGTACAGTATTTATGCTCTGTATTTAAAAAACTAACCCAGTCTGTTCCTCATGGCC	4080
QY	4081	ACTTGGGTCTCCCTGTATGATTCCTTGATGAGATATTACATGATTAATTTACTT	4140
Db	4081	ACTTGGGTCTCCCTGTATGATTCCTTGATGAGATATTACATGATTAATTTACTT	4140
QY	4141	TAAATC 4145	
Db	4141	TAAATC 4145	

US-08-630-798-1

; GENERAL INFORMATION:

APPLICANT: Timothy R. Billiar

APPLICANT: Andreas K. Nussler

APPLICANT: Larry I Shears III

NUMBER OF SEQUENCES: 2

ADDRESSEE: Lewis F. Gould, Jr.
 ADDRESS: 1000 ...

CITY: Philadelphia

ZIP: 19103

COMPUTER: IBM PC compatible

```
; CURRENT APPLICATION DATA:
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CLASSIFICATION: 436

REFERENCE/DOCKET NUMBER: 119130-2

TELEFAX: (215) 575-6015

SEQUENCE CHARACTERISTICS:

STRANDEDNESS: double ;

DESCRIPTION: Human Hepatocyte In

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; DESCRIPTION: synthase cDNA clone
;
; HYPOTHETICAL: NO

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ANTI-SENSE: NO
ORIGINAL SOURCE: Induced Human Hepatocyte RNA
TISSUE TYPE: Induced Human Hepatocyte RNA
IMMEDIATE SOURCE: Lambda Zap II cDNA
CLONE: PHINOS
POSITION IN GENOME: CHROMOSOME/SEGMENT: unknown
MAP POSITION: unknown
UNITS: unknown
FEATURE: NAME/KEY: CDS
LOCATION: 207..3668
IDENTIFICATION METHOD: Experiment
US-08-630-798-1

Query Match 100.0%; Score 4145; DB 10; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 4141 TAATC 4145
Db 4141 TAATC 4145

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RESULT 5

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US-09-176-496-1
; Sequence 1, Application US/09176496A
; GENERAL INFORMATION:
; APPLICANT: Billiar, Timothy R.
; APPLICANT: Tzeng, Edith
; APPLICANT: Nussler, Andreas K.
; APPLICANT: Geller, David A.
; APPLICANT: Simmons, Richard K.
; APPLICANT: Shears II, Larry L.
; TITLE OF INVENTION: Inducible Nitric Oxide Synthase Gene for Treatment of
; FILE REFERENCE: 187868
; CURRENT APPLICATION NUMBER: US/09/176,496A
; EARLIER FILING DATE: 1998-10-21
; EARLIER APPLICATION NUMBER: 08/465,522
; EARLIER FILING DATE: 1995-06-05
; EARLIER APPLICATION NUMBER: 08/314,917
; EARLIER FILING DATE: 1994-09-28
; EARLIER APPLICATION NUMBER: 07/981,344
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patentl Ver. 2.0
; SEQ ID NO 1
; LENGTH: 4145
; TYPE: DNA
; ORGANISM: Induced Human Hepatocyte RNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (207)..(3668)
US-09-176-496-1

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Query Match 100.0%; Score 4145; DB 15; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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1201 AACATCCCAATAGAGTGGTTTGGGAACGTGAGCTAAAGTGTACCCCTGCTCGAG 1260
1201 AACATCCCAATAGAGTGGTTTGGGAACGTGAGCTAAAGTGTACCCCTGCTCGAG 1260
1261 TGGCCAACTGCTGCTTGAAGTGGGGGCTGAGTCTCCAGGGTGGCCCTTCAATGCT 1320
1261 TGGCCAACTGCTGCTTGAAGTGGGGGCTGAGTCTCCAGGGTGGCCCTTCAATGCT 1320
1321 GGTACATGGGCAACAGATCGAGTCCGGGACTCTGTGAGCTCCAGGGTCAACATCC 1380
1321 GGTACATGGGCAACAGATCGAGTCCGGGACTCTGTGAGCTCCAGGGTCAACATCC 1380
1381 TGGAGAACTGGGCAAGAAATGGGCTTGAACACGACAGCTGGCTCGCTTGGAAAG 1440
1381 TGGAGAACTGGGCAAGAAATGGGCTTGAACACGACAGCTGGCTCGCTTGGAAAG 1440
1441 ACCAGGCTGCTGTGATCAACATTTGCTGTATCCATAGTTTTCAGAAAGCAATGTGA 1500
1441 ACCAGGCTGCTGTGATCAACATTTGCTGTATCCATAGTTTTCAGAAAGCAATGTGA 1500
1501 CCATCATGGACCACTCGGGGCGAATCCCTCATGAAGTACATGCAATGCAATACC 1560
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1561 GGTCCCGTGGGGCTGCCGGGAGACTGATTTGGCTGGCTCCCTCATGTCTGGAGCA 1620
1561 GGTCCCGTGGGGCTGCCGGGAGACTGATTTGGCTGGCTCCCTCATGTCTGGAGCA 1620
1621 TCACCCCGTGTTCACACAGAGATGCTGAACATCTCTGCTCCCTTCTACTATAC 1680
1621 TCACCCCGTGTTCACACAGAGATGCTGAACATCTCTGCTCCCTTCTACTATAC 1680
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1681 AGGTAGAGGCTGGAAACCCATGCTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740
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1741 AGATTCATTGAAAGTCTTGTGTAAGAGTGTCTTTGCTTATGCTGATGCGCAAGA 1800
1741 AGATTCATTGAAAGTCTTGTGTAAGAGTGTCTTTGCTTATGCTGATGCGCAAGA 1800
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1801 CAATGGGCTCCGAGTACAGTACCACTCTTTGGAGACAGAGAGAGAGAGAGAGAGAG 1860
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1861 CGCTGGCTGGAGCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA 1920
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1921 TGGATTAAGTACAGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
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2461 CCATTCCTGGTGAAGCTCTCTGTGAGAGATGGCAAGGCTGAACTACCTCCGGGGAGC 2520
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2521 ACCTTGGGCTTGGCCAGGCAACAGCCGCGCTGTGTCAGAGGCACTTGGAGCGAGTGG 2580
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2641 ACTGGGTAGAGACAG 2700
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2761 AAGAGCTGAGAGACAG 2820
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3001 CCGGAGATGGCCAGGCTCCCTGACACAGAGTGTCTGAGACATGAGCTCAACAGCTGA 3060
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3061 AGCCCAAG 3120
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3181 TCTGGCAGCAG 3240
3181 TCTGGCAGCAG 3240
3241 TGGTGTGGGAG 3300
3241 TGGTGTGGGAG 3300
3301 TGGCCAG 3360
3301 TGGCCAG 3360

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QY 3361 CCAAGCTATATGTTACAGACATCTGCGGACAGCTGGCCAGGAGTGTCCGCTGTC 3420
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Db 3421 TCCACAGAGAGCAGGCGCCACTCTATGTTTGGGGGANTGGCGATGGCCCGGAGAGTGG 3480
QY 3481 CCCACACCTTGAAGCAGCTGTGGCTGCGCAACCTGAAATTTGATAGAGAGAGTGGAGG 3540
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Db 3481 CCCACACCTTGAAGCAGCTGTGGCTGCGCAACCTGAAATTTGATAGAGAGAGTGGAGG 3540
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Db 3541 ACTATTTCTTCAAGCTCAAGAGCCAGAAAGCCGTATCAGAGAGATATCTTGGTGTAT 3600
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QY 3901 AGACAAATCTTAAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3960
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QY 3961 GCACCACTTCAAGTACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4020
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QY 4021 TGTACAGTATTTATGCTGCTGATTTTAAATACTAACACCCAGTCTGTCCCATGGCC 4080
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Db 4021 TGTACAGTATTTATGCTGCTGATTTTAAATACTAACACCCAGTCTGTCCCATGGCC 4080
QY 4081 ACTTGGTCTTCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4140
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Db 4081 ACTTGGTCTTCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4140
QY 4141 TAAATC 4145
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Db 4141 TAAATC 4145

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; LENGTH: 4145
; TYPE: DNA
; ORGANISM: Homo Sapiens
; US-09-440-302B-724

Query Match      100.0%; Score 4145; DB 18; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 CTGCTTTAAATCTCTGCGCCACCTTTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 60
QY 61 AAGTTCTAAGAGCAGAGAGTCTTCTGTTGATGCTGCTTAAATTTCTGTTCAAGAGCA 120
    |||
Db 61 AAGTTCTAAGAGCAGAGAGTCTTCTGTTGATGCTGCTTAAATTTCTGTTCAAGAGCA 120
QY 121 AGCCAGCTGCAAGCCCGACAGTGAAGAGATCTGAGCTCAAAATCCAGATTAAGTACATTA 180
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Db 121 AGCCAGCTGCAAGCCCGACAGTGAAGAGATCTGAGCTCAAAATCCAGATTAAGTACATTA 180
QY 181 GTGACCTGCTTTTAAAGCCATAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 240
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Db 181 GTGACCTGCTTTTAAAGCCATAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 240
QY 241 AATTCCACAGATGCAATGAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 300
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Db 241 AATTCCACAGATGCAATGAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 300
QY 301 CCGTGGCCACCTCCAGTCCAGTACAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 360
    |||
Db 301 CCGTGGCCACCTCCAGTCCAGTACAGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 360
QY 361 AGCAGATAGTCCCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 420
    |||
Db 361 AGCAGATAGTCCCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 420
QY 421 TCAAGCTGATGCAACCCCATGCTGCTCCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 480
    |||
Db 421 TCAAGCTGATGCAACCCCATGCTGCTCCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 480
QY 481 GCGGATGATCTTCCAGAGACAGTTCACATTAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 540
    |||
Db 481 GCGGATGATCTTCCAGAGACAGTTCACATTAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 540
QY 541 CCAAAATCTTGGCTGGGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600
    |||
Db 541 CCAAAATCTTGGCTGGGAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600
QY 601 AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGATGATGATGATGATGATGATGAT 660
    |||
Db 601 AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGATGATGATGATGATGATGATGAT 660
QY 661 GCTCTTCAAGAGAGCAAAATAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 720
    |||
Db 661 GCTCTTCAAGAGAGCAAAATAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 720
QY 721 AGATGAAGAAACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 780
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Db 721 AGATGAAGAAACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 780
QY 781 AGGCTGCGCAATGCCCCCAGCTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 840
    |||
Db 781 AGGCTGCGCAATGCCCCCAGCTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 840
QY 841 TCGATGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 900
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Db 841 TCGATGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 900
QY 901 GTTACTCCACCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 960
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Db 901 GTTACTCCACCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 960

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RESULT 7
US-09-440-302B-724
; Sequence 724, Application US/09440302B
; GENERAL INFORMATION:
; APPLICANT: Chenchik, Alex
; APPLICANT: Lukashyev, Matvey E.
; TITLE OF INVENTION: Human Neurobiology Array
; FILE REFERENCE: CLON-006CIP11
; CURRENT APPLICATION NUMBER: US/09/440.302B
; PRIOR FILING DATE: 1999-11-17
; PRIOR APPLICATION NUMBER: 09/053.375
; NUMBER OF SEQ ID NOS: 1193
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 724

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QY 961 ATGCGACGACGACTTCCGGGTGTGGAATGCTACGCTCATCCGCTATGCTGCTACCCAGA 1020
Db 961 ATGCGACGACGACTTCCGGGTGTGGAATGCTACGCTCATCCGCTATGCTGCTACCCAGA 1020
QY 1021 TGGCAGATGGAGATCGAGAGGGGACCCTGCAACGTGGAATTACTACAGCTGTCATCG 1080
Db 1021 TGGCAGATGGAGATCGAGAGGGGACCCTGCAACGTGGAATTACTACAGCTGTCATCG 1080
QY 1081 ACCTGGGCTGGAGGCCCAAGTACGGCCGCTTCGATGTGTGCTCCCTGGTCTGACAGCCA 1140
Db 1081 ACCTGGGCTGGAGGCCCAAGTACGGCCGCTTCGATGTGTGCTCCCTGGTCTGACAGCCA 1140
QY 1141 ATGCGCGTACGCTGAGCTTTTCCAAATCCCACTGACCTGTGCTTGAAGTGGCCATGG 1200
Db 1141 ATGCGCGTACGCTGAGCTTTTCCAAATCCCACTGACCTGTGCTTGAAGTGGCCATGG 1200
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Db 1201 AACATCCCAATACGAGTGGTTCGGGAATGAGAGCTAAATGTGACCCCTGCTGACAG 1260
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Db 1441 ACCAGGCTGCTGTGATGATCAACATTCCTGTATCATAGTTTTCAGAGCAAGATGGA 1500
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QY 1561 GGTCCGCTGGGGGCTCCGGGAGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1620
Db 1561 GGTCCGCTGGGGGCTCCGGGAGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1620
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QY 1681 AGGTAGAGGCTGGAAACCCATGCTGTCAGAGACGAGAGGAGAGCCCAAGAGAG 1740
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Db 1921 TGGATAGTACAGGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
QY 1981 CGTTGGCAATGGAGCTGGCTGGCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAG 2040
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QY 2281 TTGAGATCCCAAGCTTACACTCCAAATGTGACCTGGGAGAGAGAGAGAGAGAGAG 2340
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Db 4021 TGTACAGTTATTTATGCTCTGTATTTAAAACTAACCCAGTGTGTTCCCATGAGCC 4080
 QY 4081 ACTTGGGCTCTCCCTGTATGATTTCTTGATGAGAGATTTATGATTCATTTACTTACT 4140
 Db 4081 ACTTGGGCTCTCCCTGTATGATTTCTTGATGAGAGATTTATGATTCATTTACTTACT 4140
 QY 4141 TAATC 4145
 Db 4141 TAATC 4145
 RESULT 9
 US-09-490-208-3
 ; Sequence 3, Application US/09490208A
 ; GENERAL INFORMATION:
 ; APPLICANT: C. Frank Bennett
 ; APPLICANT: Nicholas M. Dean
 ; APPLICANT: Lex M. Cowsett
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC OXIDE SYNTHASE E
 ; CURRENT APPLICATION NUMBER: RUS-0066
 ; CURRENT FILING DATE: 2000-01-24
 ; NUMBER OF SEQ ID NOS: 182
 ; SEQ ID NO 3
 ; LENGTH: 4145
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (207)...(3668)
 US-09-490-208-3
 Query Match 100.0%; Score 4145; DB 18; Length 4145;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 Db 61 AGTTTCAAGGACAGAGTCTCTCTGTTGACTGTCTTACCCTGGGAGGAGTGC 120
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 QY 541 CCAAACTTGGCTGGGGTCAATTATGACTCCCAAAAGTTTGACGAGAGAGCCAGGACA 600

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RESULT 10
US-09-490-208-10
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? GENERAL INFORMATION:
? APPLICANT: C. Frank Bennett
? APPLICANT: Nicholas M. Dean
? APPLICANT: Lex M. Cowser
? TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC OXIDE SYNTHASE E
? FILE REFERENCE:
? CURRENT APPLICATION NUMBER: US-09-490, 208A
? CURRENT FILING DATE: 2000-01-24
? NUMBER OF SEQ ID NOS: 182
? SEQ ID NO 10
? LENGTH: 4145
? TYPE: DNA
? ORGANISM: Mus musculus
? FEATURE:
? NAME/KEY: mRNA
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US-09-490-208-10

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Query Match 100.0%; Score 4145; DB 18; Length 4145;
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Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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2341 TGGAGAGCTCAAGCTTTCAGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2400
2401 TGTTCACCATGAGGCTCAAAATCTGCGAGAAATCTCAAAAGTCCAGATCCAGCGTGGCA 2460
2401 TGTTCACCATGAGGCTCAAAATCTGCGAGAAATCTCAAAAGTCCAGATCCAGCGTGGCA 2460
2461 CCATCTGCTGAGAGTCTGCTGAGAGTGGCAGAGGCTGAGAGTGGCAGAGGCTGAGAG 2520
2461 CCATCTGCTGAGAGTCTGCTGAGAGTGGCAGAGGCTGAGAGTGGCAGAGGCTGAGAG 2520
2521 ACCTTGGGCTTTCAGAGCAACAGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2580
2521 ACCTTGGGCTTTCAGAGCAACAGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2580

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Db 2521 ACCCTGGGGTTTGGCCAGGCAACAGCGGCCCTGGTCCAAAGCATCTCGAGGAGGAGTGG 2580
QY 2581 TGGATGGGCCCCACACACCCAGACAGTGGCGCTGGAGAGCTGATAGAGTGGCACT 2640
Db 2581 TGGATGGGCCCCACACACCCAGACAGTGGCGCTGGAGAGCTGATAGAGTGGCACT 2640
QY 2641 ACTGGGTCAGTACAAAGAGGCTGGCCCCCTGGTCTACTAGGAGGAGGCTTCACTACTCC 2700
Db 2641 ACTGGGTCAGTACAAAGAGGCTGGCCCCCTGGTCTACTAGGAGGAGGCTTCACTACTCC 2700
QY 2701 GGGACATACACACACCCCAACCCAGCTGCTCTCAAAAGCTGGCCAGGTTGCCACAG 2760
Db 2701 GGGACATACACACACCCCAACCCAGCTGCTCTCAAAAGCTGGCCAGGTTGCCACAG 2760
QY 2761 AAGAGCTGAGAGACAGAGGCTGGAGGCTGGAGGCTTCCAGAGTACAGCAAGTGA 2820
Db 2761 AAGAGCTGAGAGACAGAGGCTGGAGGCTGGAGGCTTCCAGAGTACAGCAAGTGA 2820
QY 2821 AGTTACCAACAGACCCCACTTCTGAGAGTGTAGAGAGTTCCTCCCTGGGGTGT 2880
Db 2821 AGTTACCAACAGACCCCACTTCTGAGAGTGTAGAGAGTTCCTCCCTGGGGTGT 2880
QY 2881 CTGCTGCTTCTGCTTCCAGGTCCTCCATTCGAAAGCCAGGTTCTACTCCATGACT 2940
Db 2881 CTGCTGCTTCTGCTTCCAGGTCCTCCATTCGAAAGCCAGGTTCTACTCCATGACT 2940
QY 2941 CCTCCCGGATACAGCGCCCAAGAGATTCACCTGATGGCGGTGGTCACTACACACA 3000
Db 2941 CCTCCCGGATACAGCGCCCAAGAGATTCACCTGATGGCGGTGGTCACTACACACA 3000
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Db 3001 CCGAGATGGCGAGGTCCTCTGACACAGTGTCTGACAGACATGGCTCAACAGCTGA 3060
QY 3061 AGCCCAAGACCCAGTGCCTGTTGTGGGAATGCCAGCGGCTTCCACTCCCGGAG 3120
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QY 3301 TGGCCCAAGAGGAGGCTGCTGATGGGTGACACAGCTATTCGCCCTGGCGCAAGC 3360
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QY 3361 CCAAGGCTATGTTCAAGGATCTGCGGAGAGCTGGCGAGCGAGGTCCTGGTGC 3420
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QY 3481 CCCAGACCCGGAAGAGGCTGGGTCGCAACCTGAATTGAATGAGGAGCGTGGAGG 3540
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QY 3541 ACTATTTCTTCAAGCTCAAGAGCAGAAAGCTATACAGAGATATCTCGGTGCTGAT 3600
Db 3541 ACTATTTCTTCAAGCTCAAGAGCAGAAAGCTATACAGAGATATCTCGGTGCTGAT 3600
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Db 3601 TTCCTTACAGGGAAGAGAGAGGCTGGGTGCGGTGACGCCAGGCTGAGATGTGAG 3660

QY 3661 CGCTGTAGAGGCTTACAGAGAGGTTAAAGCTCCCGGACAGAACTTAAGATGAGCCA 3720
Db 3661 CGCTGTAGAGGCTTACAGAGAGGTTAAAGCTCCCGGACAGAACTTAAGATGAGCCA 3720
QY 3721 GCTGTGATTTATGTGAGGCTACAGGCGCTGGGAGATGGAGAAAGTATATCCCCAGC 3780
Db 3721 GCTGTGATTTATGTGAGGCTACAGGCGCTGGGAGATGGAGAAAGTATATCCCCAGC 3780
QY 3781 CTCAGTCTATTTCTCAAGCTTGTCCCATCAAGCCCTTACTGTGACCTCTAACAA 3840
Db 3781 CTCAGTCTATTTCTCAAGCTTGTCCCATCAAGCCCTTACTGTGACCTCTAACAA 3840
QY 3841 GTAGCACCTTGATATGAGGAGCTCTCTCTCAAACTGGGAGGCTCCCTGGTCCCTGG 3900
Db 3841 GTAGCACCTTGATATGAGGAGCTCTCTCTCAAACTGGGAGGCTCCCTGGTCCCTGG 3900
QY 3901 AGACAAATCTTAAATGGCAGGCGTGGGAGTGGGTAAGATGAGACTGCTGTGAGT 3960
Db 3901 AGACAAATCTTAAATGGCAGGCGTGGGAGTGGGTAAGATGAGACTGCTGTGAGT 3960
QY 3961 GCACCACTTCAAGTGAACCAAGAGAGTGTATCGCACCACTGTATTTAACTGCTTG 4020
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QY 4021 TGTACGTTATTTATGCTCTGTATTTAAAAAAGTAAACCAAGCTGTCCCATGAGC 4080
Db 4021 TGTACGTTATTTATGCTCTGTATTTAAAAAAGTAAACCAAGCTGTCCCATGAGC 4080
QY 4081 ACTTGGCTTCCCTGATGATTTCTGTGATGAGATTTTACATGATTTGATTTACTT 4140
Db 4081 ACTTGGCTTCCCTGATGATTTCTGTGATGAGATTTTACATGATTTGATTTACTT 4140
QY 4141 TAATC 4145
Db 4141 TAATC 4145

RESULT 11
US-09-543-679A-2507
; Sequence 2507, Application US/09543679A
; GENERAL INFORMATION:
; APPLICANT: NYCE, Jonathan W.
; TITLE OF INVENTION: LOW ADENOSINE ANTI-SENSE OLIGONUCLEOTIDE,
; OF AIRWAY DISORDERS ASSOCIATED WITH
; COMPOSITIONS, KIT & METHOD FOR TREATMENT
; OF AIRWAY DISORDERS ASSOCIATED WITH
; BRONCHOCONSTRICTION, LONG INFLAMMATION,
; NUMBER OF SEQUENCES: 3111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
; STREET: 7 Clarke Drive
; City: Cranbury
; STATE: NJ
; COUNTRY: USA
; ZIP: 08512
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-R
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: N/A
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/543,679A
; FILING DATE: 13-Apr-2000
; CLASSIFICATION: UNKNOWN
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/127,938
; FILING DATE: 1998-08-03
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: EPI-0067191b
; TELECOMMUNICATION INFORMATION:

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TELEPHONE: 609-409-3035
TELEFAX: 413-254-9245
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 2507:
SEQUENCE CHARACTERISTICS:
LENGTH: 4145 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 2507:
US-09-543-679A-2507

Query Match 100.0%; Score 4145; DB 21; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CTGCTTTAAATCTCGGCGACCTTGTATGAGGGAGTGGGAGTTCAGACAGTCCG 60
1 CTGCTTTAAATCTCGGCGACCTTGTATGAGGGAGTGGGAGTTCAGACAGTCCG 60
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61 AAGTCTCAAGGACAGGCTCTCTCTGTTGACTGTCCTTACCCTGGGAGGCAATG 120
121 AGGCACTGCAAGCCCAAGTGAAGAATGATGAGTGAATGCAATGCAATGATGA 180
121 AGGCACTGCAAGCCCAAGTGAAGAATGATGAGTGAATGCAATGCAATGATGA 180
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181 GTGACCTGCTTTGTAAGGCAATGAGATGAGTCTGTCCTTGAATTTCTTCAAG 240
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241 AATTCACCACTGTATGCAATGATGAGGAAAAAGATCAACATGATGAGAAAGCC 300
301 CCTGTGCACTGCTCAGTCCAGTGCAGACAGATGATGATGATGATGATGATG 360
301 CCTGTGCACTGCTCAGTCCAGTGCAGACAGATGATGATGATGATGATGATG 360
361 AGCAGATGAGTCCCGGACGCTGCTGAGAGAGGAGAAAGATGCTCCGAAATCT 420
361 AGCAGATGAGTCCCGGACGCTGCTGAGAGAGGAGAAAGATGCTCCGAAATCT 420
421 TCAAGCTGATGCAACCCCATGCTCCCGGAGGAGTGAAGATCAAAATGAGGCA 480
421 TCAAGCTGATGCAACCCCATGCTCCCGGAGGAGTGAAGATCAAAATGAGGCA 480
481 GCGGATGATGCTTCCAGACACATTCACCATTAAGGCAAGGATTTAACTTGAG 540
481 GCGGATGATGCTTCCAGACACATTCACCATTAAGGCAAGGATTTAACTTGAG 540
541 CCAATCTTGGCTGGGGTCCATTAATGACTCCCAAAAGTTTGACAGAGGAGACA 600
541 CCAATCTTGGCTGGGGTCCATTAATGACTCCCAAAAGTTTGACAGAGGAGACA 600
601 AGGCTACCCCTCCAGATGAGTCTTACCTCAAGCTATGCAATTTGCAACCAAT 660
601 AGGCTACCCCTCCAGATGAGTCTTACCTCAAGCTATGCAATTTGCAACCAAT 660
661 GCTCTTCAAGAGGCAAAATAGAGAACATCTGGCCAGGAGTGAAGCGGTAAAG 720
661 GCTCTTCAAGAGGCAAAATAGAGAACATCTGGCCAGGAGTGAAGCGGTAAAG 720
721 AGATGAAGAAACAGGAACCTTACCACTGACGAGAGATGAGATCTATCTTGCC 780
721 AGATGAAGAAACAGGAACCTTACCACTGACGAGAGATGAGATCTATCTTGCC 780
781 AGGCTGCGCAATGCGCCAGCTGATGAGGAGATCAATGATGATGATGATGATG 840
781 AGGCTGCGCAATGCGCCAGCTGATGAGGAGATCAATGATGATGATGATGATG 840
841 TCGATGCCGAGAGCTGTTCACTGCGCGGGAATGTTGAACACATGTCAGACAG 900

841 TCGATGCCGAGAGCTGTTCACTGCGCGGGAATGTTGAACACATGTCAGACAG 900
901 GTTACTCCACCAACATGCAACATCAGTGGCCATACCGTGTTCCTCCAGGAG 960
901 GTTACTCCACCAACATGCAACATCAGTGGCCATACCGTGTTCCTCCAGGAG 960
961 ATGGCAAGCAAGCTTCCGGGTGGGAAATGCTACGCTCAATGCTGAGGCTAC 1020
961 ATGGCAAGCAAGCTTCCGGGTGGGAAATGCTACGCTCAATGCTGAGGCTAC 1020
1021 TGCCAGATGCGAGATCAGAGGGAGCCCTGCAACGATGAAATTCACCTGAT 1080
1021 TGCCAGATGCGAGATCAGAGGGAGCCCTGCAACGATGAAATTCACCTGAT 1080
1081 ACCTGGGCTGGAAGCCCAAGTACGCGCTTCGATGATGATGATGATGATGAT 1140
1081 ACCTGGGCTGGAAGCCCAAGTACGCGCTTCGATGATGATGATGATGATGAT 1140
1141 ATGGCCGAGACCGTGAAGCTTTCGAAATCCACCTGACCTTGTGAGGAGCA 1200
1141 ATGGCCGAGACCGTGAAGCTTTCGAAATCCACCTGACCTTGTGAGGAGCA 1200
1201 AACATCCCAATACGAGTGTGTTGCGGAATCGAGCTAAAGTGTACGCTGCT 1260
1201 AACATCCCAATACGAGTGTGTTGCGGAATCGAGCTAAAGTGTACGCTGCT 1260
1261 TGCCCAACATGCTGTTAGATGAGGCGGCTGAGATGATGATGATGATGATG 1320
1261 TGCCCAACATGCTGTTAGATGAGGCGGCTGAGATGATGATGATGATGATG 1320
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1321 GGTACATGCGACAGATGCGAGTCCGAGCTTCTGTAGCTCAGCGCTACAA 1380
1381 TGGAGAAAGTGGGAGAGGATGAGGCTTGAAGAAAGCAACATGCTGCTGGA 1440
1381 TGGAGAAAGTGGGAGAGGATGAGGCTTGAAGAAAGCAACATGCTGCTGGA 1440
1441 ACCAGGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1500
1441 ACCAGGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1500
1501 CCATCATGAGACCAACCTGCTGAGATTCCTTATGATGATGATGATGATGAT 1560
1501 CCATCATGAGACCAACCTGCTGAGATTCCTTATGATGATGATGATGATGAT 1560
1561 GGTCCGCTGGGGCTGCGCGGAGAGTGGATGATGATGATGATGATGATGAT 1620
1561 GGTCCGCTGGGGCTGCGCGGAGAGTGGATGATGATGATGATGATGATGAT 1620
1621 TCACCCCGCTGTTTCAACAGAGATGATGATGATGATGATGATGATGATGAT 1680
1621 TCACCCCGCTGTTTCAACAGAGATGATGATGATGATGATGATGATGATGAT 1680
1681 AGGTAGAGGCTGGAAGAACCAATGCTGAGAGAGAGAGAGAGAGAGAGAGAG 1740
1681 AGGTAGAGGCTGGAAGAACCAATGCTGAGAGAGAGAGAGAGAGAGAGAGAG 1740
1741 AGATTCATGGAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1800
1741 AGATTCATGGAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1800
1801 CAATGCGCTGCGAGTCAAGTCAACATCCTCTTTCGACAGAGACAGAGAAAT 1860
1801 CAATGCGCTGCGAGTCAAGTCAACATCCTCTTTCGACAGAGACAGAGAAAT 1860
1861 CGCTGCGCTGGAAGCTGAGGCGCTTATGAGCTGCTGCTTCAACCCCAAG 1920
1861 CGCTGCGCTGGAAGCTGAGGCGCTTATGAGCTGCTGCTTCAACCCCAAG 1920
1921 TGGATAGTACAGAGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAG 1980

QY 4141 TAATC 4145
 Db 4141 TAATC 4145

RESULT 12

US-10-182-049-3
 ; Sequence 3, Application US/10182049
 ; GENERAL INFORMATION:
 ; APPLICANT: Isis Pharmaceuticals, Inc.
 ; APPLICANT: C. Frank Bennett
 ; APPLICANT: Nicholas M. Dean
 ; APPLICANT: Lex M. Cowsett
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC OXIDE SYNTHASE EXPRESSION
 ; FILE REFERENCE: RSP-0360
 ; CURRENT APPLICATION NUMBER: US/10/182,049
 ; CURRENT FILING DATE: 2002-07-27
 ; PRIOR APPLICATION NUMBER: 09/490,208
 ; PRIOR FILING DATE: 2000-01-24
 ; NUMBER OF SEQ ID NOS: 182
 ; SEQ ID NO 3
 ; LENGTH: 4145
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (207)...(3668)
 ; US-10-182-049-3

Query Match 100.0%; Score 4145; DB 41; Length 4145;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTGCTTTAAATCTCTGCGCACCCTTTGATGAGGGGAGCTGGCAGTCTAGACAGTCCG 60
 Db 1 CTGCTTTAAATCTCTGCGCACCCTTTGATGAGGGGAGCTGGCAGTCTAGACAGTCCG 60
 QY 61 AAGTTCACAGCAGAGGCTCTCTGCTTGTGATGCTGCTTACCCCGGGAGGAGCAGTGC 120
 Db 61 AAGTTCACAGCAGAGGCTCTCTGCTTGTGATGCTGCTTACCCCGGGAGGAGCAGTGC 120
 QY 121 AGCCAGTGAAGCCCAAGCAGTGAAGAACATCTGAGCTCAATCAATCAATCAATCAATCA 180
 Db 121 AGCCAGTGAAGCCCAAGCAGTGAAGAACATCTGAGCTCAATCAATCAATCAATCAATCA 180
 QY 181 GTGACCTGCTTTGTAAGGCTTAAGATGAGTGGCTCTCTGGAATTTCTGTCAAGCA 240
 Db 181 GTGACCTGCTTTGTAAGGCTTAAGATGAGTGGCTCTCTGGAATTTCTGTCAAGCA 240
 QY 241 AATTCACAGTGAAGTGAATGGGAAAAAGACATCAACACATCAATGAGGAAAGCC 300
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 QY 301 CCGTGGCCAGCTCAGTCCAGTGAACAGATGACCTTCACTATCACAACCTCAGCAAGC 360
 Db 301 CCGTGGCCAGCTCAGTCCAGTGAACAGATGACCTTCACTATCACAACCTCAGCAAGC 360
 QY 361 AGCAGATGAGTCCCGGAGGCGCTCTGAGAGAGGGAAGAAATCTCCAAATCTCTGG 420
 Db 361 AGCAGATGAGTCCCGGAGGCGCTCTGAGAGAGGGAAGAAATCTCCAAATCTCTGG 420
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 Db 421 TCAACCTGATGCAACCCCATTTGCTCCCAAGGAGATGAGATGATCAAAAAGTGGGCA 480
 QY 481 GCGGAGTGAATTCGAAGACACTTTCACATAGGCCAAAGGATTTTAACTTGCAGAGT 540
 Db 481 GCGGAGTGAATTCGAAGACACTTTCACATAGGCCAAAGGATTTTAACTTGCAGAGT 540
 QY 541 CCAATCTGCTGGGAGTCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600
 Db 541 CCAATCTGCTGGGAGTCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600

QY 601 AGCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGATGATGATGATGATGATGATGATGAT 660
 Db 601 AGCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGATGATGATGATGATGATGATGATGAT 660
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 Db 661 GCTCCTTCAAGAGGCAAAATAGAGAACATCTGGCCAGGCTGGAAGCGGTAAACAAAG 720
 QY 721 AGATGAAGAACAGAGGAGCTTCCAGTGAAGAGATGAGTGAAGAGTGAAGAGTGAAGAGTGA 780
 Db 721 AGATGAAGAACAGAGGAGCTTCCAGTGAAGAGATGAGTGAAGAGTGAAGAGTGAAGAGTGA 780
 QY 781 AGGCTGAGGAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 840
 Db 781 AGGCTGAGGAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 840
 QY 841 TCGATGCGCGAGCTGTTCCACATGCGCGGGAATGTTGAACACATCTGCAGACAGTGC 900
 Db 841 TCGATGCGCGAGCTGTTCCACATGCGCGGGAATGTTGAACACATCTGCAGACAGTGC 900
 QY 901 GTTACTCCACCAAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 960
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 QY 961 ATGGCAAGCAGCAGCTCCGGGTGTGGAATGCTCAGCTCATCCGCTAGCTGCTACAGAGA 1020
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 Db 1021 TGGCAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1080
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 Db 1081 ACCCTGGGTGGAAGCCCAAGTACGCGCGCTGATGATGATGATGATGATGATGATGATGATG 1140
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 Db 1261 TGGCAACATGCTGCTTGAAGTGGGCGGCTGAGTTCACAGGAGGCGCTTCAATGCT 1320
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 Db 1321 GGTACATGAGGACAGAGATGCGGAGCTTCTGTACGTCAGAGGCTACAAATTC 1380
 QY 1381 TGGAGAGTGGGAG 1440
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 Db 1441 ACCAGGCTGCTTGAAGATCAACATTTCTGTATTCATAGTTTTCAGAGAGAGATGTA 1500
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 Db 1561 GGTGCGGCTGGGAGGCTGGCGGAGAGTGTGGCTGCTCCCATGCTGGGAGCA 1620
 QY 1621 TCAACCCCGTGTTCACAGAGAGATGCTGATGATGATGATGATGATGATGATGATGATGAT 1680
 Db 1621 TCAACCCCGTGTTCACAGAGAGATGCTGATGATGATGATGATGATGATGATGATGATGAT 1680
 QY 1681 AGGTAGAGGCTGGAAGAACCATGCTGTGGCAGAGACGAGAGAGAGAGAGAGAGAGAGAGAG 1740

Db 1681 AGGTAGAGGCTGGAAAACCATCTCTGGCAGAGACGAAAGCGAGACCAGAGAGAG 1740
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Db 1741 AGATTCATTTGAAGTCTTGTCAAAAGTGTCTCTTTGCTGTATGATGATGCGCAAA 1800
Qy 1801 CAATGCGTCCGAGTCAAGTCAACATCTCTTTGCGACAGAGAGAGAGAGAGAGAGAG 1860
Db 1801 CAATGCGTCCGAGTCAAGTCAACATCTCTTTGCGACAGAGAGAGAGAGAGAGAGAG 1860
Qy 1861 CGCTGACCTGAGACCTGGGGGCTTATTCAGTGTGCTCTTCAACCCCAAGTTGTCTGA 1920
Db 1861 CGCTGACCTGAGACCTGGGGGCTTATTCAGTGTGCTCTTCAACCCCAAGTTGTCTGA 1920
Qy 1921 TGGATAGTACAGAGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
Db 1921 TGGATAGTACAGAGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
Qy 1981 CGTTTGGCAATGAG 2040
Db 1981 CGTTTGGCAATGAG 2040
Qy 2041 TGAAGAGCTCAACAACAATTCAGTACAGTGTGTTGGCTGGCTCCAGCATGATACC 2100
Db 2041 TGAAGAGCTCAACAACAATTCAGTACAGTGTGTTGGCTGGCTCCAGCATGATACC 2100
Qy 2101 CTCGGTCTGCGCTTTGCTCAATGATGATCAGAGAGAGAGAGAGAGAGAGAGAGAG 2160
Db 2101 CTCGGTCTGCGCTTTGCTCAATGATGATCAGAGAGAGAGAGAGAGAGAGAGAGAG 2160
Qy 2161 ACCTACACCCGATGGAG 2220
Db 2161 ACCTACACCCGATGGAG 2220
Qy 2221 GGGCGGTGCAAACTTCAAG 2280
Db 2221 GGGCGGTGCAAACTTCAAG 2280
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Db 2281 TTCAGATCCCAAGCTCTACACCTCCATGATGATGATGATGATGATGATGATGATGAT 2340
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Db 2341 TGCAGAGCTACAGAGCTTTGGACCTCAGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2400
Qy 2401 TGTTCACATGAGAGCTCAAAATCTGCGAGAGATCTCAAAAGTCCGACATCCAGCTGCA 2460
Db 2401 TGTTCACATGAGAGCTCAAAATCTGCGAGAGATCTCAAAAGTCCGACATCCAGCTGCA 2460
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Db 2461 CCATCTGCTGAGAGCTCTGAG 2520
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Db 2521 ACCTTGGGGTGTGGCCAGGCAACGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2580
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Db 2581 TGGATGGGCCCCACAGCCACAG 2640
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Db 2641 ACTGGGTCAAGTGAAG 2700
Qy 2701 CGGACATACACAG 2760
Db 2701 CGGACATACACAG 2760
Qy 2761 AAGAGCTGAG 2820
Db 2761 AAGAGCTGAG 2820
Qy 2821 AGTTACCAAG 2880
Db 2821 AGTTACCAAG 2880
Qy 2881 CTGCGGCTGCTCTCTTCCAGAGTCCGCAATCTTGAAGAGAGAGAGAGAGAGAGAGAGAG 2940
Db 2881 CTGCGGCTGCTCTCTTCCAGAGTCCGCAATCTTGAAGAGAGAGAGAGAGAGAGAGAGAG 2940
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Db 2941 CCTCCGGAGATCAG 3000
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Db 3001 CCGAGAGATGGCAG 3060
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Db 3181 TCTGGAG 3240
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Db 3421 TCCACAG 3480
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Qy 3721 GCTTGCATTTATCTGAG 3780
Db 3721 GCTTGCATTTATCTGAG 3780
Qy 3781 CTCAGGCTTATTTCTTCAAG 3840
Db 3781 CTCAGGCTTATTTCTTCAAG 3840
Qy 3841 GTAGACCTGAGATGAG 3900
Db 3841 GTAGACCTGAGATGAG 3900

QY 3901 AGACAAAATCTTAAATGCCAGGCTGGCGAGTGGGTGAAGATGGAATCTCTCTGACT 3960
DB 3901 AGACAAAATCTTAAATGCCAGGCTGGCGAGTGGGTGAAGATGGAATCTCTCTGACT 3960
QY 3961 GCACCACTTCAAGTACACACAGAGAGTGCATGCAACCACTGTTATTTAACTGCGCTTG 4020
DB 3961 GCACCACTTCAAGTACACACAGAGAGTGCATGCAACCACTGTTATTTAACTGCGCTTG 4020
QY 4021 TGTACAGTAAATTTATGCTCTGTATTTAAATAACCTAACCCAGTCTGTTCCGATGGCC 4080
DB 4021 TGTACAGTAAATTTATGCTCTGTATTTAAATAACCTAACCCAGTCTGTTCCGATGGCC 4080
QY 4081 ACTTGGGCTTCCCTGTATGATCTCTGTATGATGATATTTACATGATGATTTACTT 4140
DB 4081 ACTTGGGCTTCCCTGTATGATCTCTGTATGATGATATTTACATGATGATTTACTT 4140
QY 4141 TATATC 4145
DB 4141 TATATC 4145

RESULT 13

US-10-182-049-10
Sequence 10, Application US/10182049
GENERAL INFORMATION:
APPLICANT: Isis Pharmaceuticals, Inc.
APPLICANT: C. Frank Bennett
APPLICANT: Nicholas M. Dean
APPLICANT: Lex M. Cowser
TITLE OF INVENTION: ANTISENSE MODULATION OF INDUCIBLE NITRIC OXIDE SYNTHASE EXPRESSION
FILE REFERENCE: R1SP-0360
CURRENT APPLICATION NUMBER: US/10/182,049
CURRENT FILING DATE: 2002-07-27
PRIOR APPLICATION NUMBER: 09/490,208
PRIOR FILING DATE: 2000-01-24
NUMBER OF SEQ ID NOS: 182
SEQ ID NO 10
LENGTH: 4145
TYPE: DNA
ORGANISM: Mus musculus
FEATURE:
NAME/KEY: mRNA
LOCATION: (1)...(4110)
US-10-182-049-10

Query Match

100.0%; Score 4145; DB 41; Length 4145;

Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;

Matches 4145; Conservative 0;

QY 1 CTGCTTTAAATCTGCGGACCTTGTGATGAGGGAGTGGGCACTTCTAGACAGTCCG 60
DB 1 CTGCTTTAAATCTGCGGACCTTGTGATGAGGGAGTGGGCACTTCTAGACAGTCCG 60
QY 61 AATTTTCAGAGCAGAGTCTCTCTGTTGACTGCTTACCCCGGGAGGAGTGC 120
DB 61 AATTTTCAGAGCAGAGTCTCTCTGTTGACTGCTTACCCCGGGAGGAGTGC 120
QY 121 AGCCAGTGCAGAGCCCGCAGTGAAGACATCTGAGCTCAATCCAGATTAAGTGAATTA 180
DB 121 AGCCAGTGCAGAGCCCGCAGTGAAGACATCTGAGCTCAATCCAGATTAAGTGAATTA 180
QY 121 AGCCAGTGCAGAGCCCGCAGTGAAGACATCTGAGCTCAATCCAGATTAAGTGAATTA 180
DB 121 AGCCAGTGCAGAGCCCGCAGTGAAGACATCTGAGCTCAATCCAGATTAAGTGAATTA 180
QY 181 GTGACCTGCTTTGTAAGGCAATGAGATGAGTCTGCTTGAATTTCTGTTCAAGACA 240
DB 181 GTGACCTGCTTTGTAAGGCAATGAGATGAGTCTGCTTGAATTTCTGTTCAAGACA 240
QY 241 AATTCACAGATGCAATGATGAGGAAAAAGACATCAACAAATGTGAGAAAGCC 300
DB 241 AATTCACAGATGCAATGATGAGGAAAAAGACATCAACAAATGTGAGAAAGCC 300
QY 301 CTTGTGCACTGCAAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC 360
DB 301 CTTGTGCACTGCAAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC 360

QY 361 AGCAGATGATGCTCCCGCAGCCCTTCGTGAGACGGGAGAAAGATCTCCAGATCTTG 420
DB 361 AGCAGATGATGCTCCCGCAGCCCTTCGTGAGACGGGAGAAAGATCTCCAGATCTTG 420
QY 421 TCAAGTGTATGCAACCCATGCTCTCCCAAGGAGTGAAGATCAAAAACCTGGGGCA 480
DB 421 TCAAGTGTATGCAACCCATGCTCTCCCAAGGAGTGAAGATCAAAAACCTGGGGCA 480
QY 481 GCGGAGTACTTTCCAAAGACACTTACCATTAAGGCCAAAGGATTTAACTGAGGT 540
DB 481 GCGGAGTACTTTCCAAAGACACTTACCATTAAGGCCAAAGGATTTAACTGAGGT 540
QY 541 CCAATATTTGCTGCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCT 600
DB 541 CCAATATTTGCTGCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCT 600
QY 601 AGCTTACCCCTCCAGATGAGTCTTACCTCAAGCTATGCAATTTGTCAACCAATATTAG 660
DB 601 AGCTTACCCCTCCAGATGAGTCTTACCTCAAGCTATGCAATTTGTCAACCAATATTAG 660
QY 661 GCTCTTCAAGAGGCAAAAATAGAGACATGCGCAGGAGTGAAGGCGTAAACAAG 720
DB 661 GCTCTTCAAGAGGCAAAAATAGAGACATGCGCAGGAGTGAAGGCGTAAACAAG 720
QY 721 AGATGAACACACAGAACTTACCAACTGACGGGAGATGAGTCTTCCGACCAAG 780
DB 721 AGATGAACACACAGAACTTACCAACTGACGGGAGATGAGTCTTCCGACCAAG 780
QY 781 AGGCTGCGGCAATGCCCCACGCTGATGAGAGATGAGTCTTCCGACCAAG 840
DB 781 AGGCTGCGGCAATGCCCCACGCTGATGAGAGATGAGTCTTCCGACCAAG 840
QY 841 TCGATGCGCGGAGTGTTCACCTGCGCGGGAATGTTGAACACATGCGACAGTGC 900
DB 841 TCGATGCGCGGAGTGTTCACCTGCGCGGGAATGTTGAACACATGCGACAGTGC 900
QY 901 GTTACTCCACCAACATGAGCAATGAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC 960
DB 901 GTTACTCCACCAACATGAGCAATGAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC 960
QY 961 ATGCAAGCAGAGTCTCGGAGTGTGAGATGCTGACATGCTGCTGCTGCTGCTGCTGCTG 1020
DB 961 ATGCAAGCAGAGTCTCGGAGTGTGAGATGCTGACATGCTGCTGCTGCTGCTGCTGCTG 1020
QY 1021 TGCCAGATGCGAGATGAGGAGGAGCCCTGCAACGTTGAATTAAGTCTGATGCTGATG 1080
DB 1021 TGCCAGATGCGAGATGAGGAGGAGCCCTGCAACGTTGAATTAAGTCTGATGCTGATG 1080
QY 1081 ACCTGAGTGCAGAGCCCAAGTACGCGCTGCTGATGCTGCTGCTGCTGCTGCTGCTGCTG 1140
DB 1081 ACCTGAGTGCAGAGCCCAAGTACGCGCTGCTGATGCTGCTGCTGCTGCTGCTGCTGCTG 1140
QY 1141 ATGCGCGTGCAGAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC 1200
DB 1141 ATGCGCGTGCAGAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGCAGTGC 1200
QY 1201 AACATCCCAATATGAGTGTGTTGCGAATGCTGCAACCTGACCTTGTGCTGAGTGGCAT 1260
DB 1201 AACATCCCAATATGAGTGTGTTGCGAATGCTGCAACCTGACCTTGTGCTGAGTGGCAT 1260
QY 1261 TGGCCAAACATGCTGCTTGAAGTGGGCGGCTGAGTGTGCTGAGTGTGCTGAGTGTG 1320
DB 1261 TGGCCAAACATGCTGCTTGAAGTGGGCGGCTGAGTGTGCTGAGTGTGCTGAGTGTG 1320
QY 1321 GGTACATGCGGACAGAGATGCGAGTCCGAGCTTGTGAGTGCAGGCTGCAACATCC 1380
DB 1321 GGTACATGCGGACAGAGATGCGAGTCCGAGCTTGTGAGTGCAGGCTGCAACATCC 1380
QY 1381 TGGAGAAAGTGGGAGGAGTGGGCTGGAACCGCACAGTGCCTGCTGGAAG 1440
DB 1381 TGGAGAAAGTGGGAGGAGTGGGCTGGAACCGCACAGTGCCTGCTGGAAG 1440

[illegible]

Db 841 TCGATCCCGCCAGCTGTCACACTGCCGGGAAATGTTTGAACACATCTGCACACACGCTGC 900
QY 901 GTTACTCCACCAATGGAATATGAGTCGGCCATCCACCTGTTCCCGCCAGGAGTG 960
Db 901 GTTACTCCACCAATGGAATATGAGTCGGCCATCCACCTGTTCCCGCCAGGAGTG 960
QY 961 ATGGCAAGCAGACTTCGGGGTGTGGAAATGCTCAGCTCATCCGCTATGCTGCTACCA 1020
Db 961 ATGGCAAGCAGACTTCGGGGTGTGGAAATGCTCAGCTCATCCGCTATGCTGCTACCA 1020
QY 1021 TGGCAGATGGCAGCATCAGAGGGAGCCCTGCCAAGTGGAAATCACTAGCTGTCATCG 1080
Db 1021 TGGCAGATGGCAGCATCAGAGGGAGCCCTGCCAAGTGGAAATCACTAGCTGTCATCG 1080
QY 1081 ACCGTGGGCTGGAAGCCCAAGTACGGCCGCTTGTATGTGGTCCCGCTGCTGCAGGCA 1140
Db 1081 ACCGTGGGCTGGAAGCCCAAGTACGGCCGCTTGTATGTGGTCCCGCTGCTGCAGGCA 1140
QY 1141 ATGGCCGTGACCTCTGACCTCTTGCAGAAATCCACCTGACCTTGTGCTGAGGTGGCCATGG 1200
Db 1141 ATGGCCGTGACCTCTGACCTCTTGCAGAAATCCACCTGACCTTGTGCTGAGGTGGCCATGG 1200
QY 1201 AACATCCCAAAATAGAGTGTGTTGGGAACTGAGACCTAAATGGTACGCCCTGCTGCAG 1260
Db 1201 AACATCCCAAAATAGAGTGTGTTGGGAACTGAGACCTAAATGGTACGCCCTGCTGCAG 1260
QY 1261 TGGCCACATGCTGCTTGAAGTGGGCGCTGAGATTCCAGGGTGCCTTCATGAGCT 1320
Db 1261 TGGCCACATGCTGCTTGAAGTGGGCGCTGAGATTCCAGGGTGCCTTCATGAGCT 1320
QY 1321 GGTACATGGGACAGAGATTCGGAGTCCGGGACTTCTGTGACCTCAGCGCTACAAATCC 1380
Db 1321 GGTACATGGGACAGAGATTCGGAGTCCGGGACTTCTGTGACCTCAGCGCTACAAATCC 1380
QY 1381 TGGAGGAAGTGGGAGAGGAATGGGCTGTGAAGACGACAAAGCTGGCTCGCTGCGAAG 1440
Db 1381 TGGAGGAAGTGGGAGAGGAATGGGCTGTGAAGACGACAAAGCTGGCTCGCTGCGAAG 1440
QY 1441 ACCAGGCTGCTGTAATCAACATTTGCTGTATCCATAGTTTTCAGAGCAGAAATGGA 1500
Db 1441 ACCAGGCTGCTGTAATCAACATTTGCTGTATCCATAGTTTTCAGAGCAGAAATGGA 1500
QY 1501 CCATCATGAGACACACCTCGGCTGCAAGATCCTTCAATGAAGTACATGCAAGAAATGAC 1560
Db 1501 CCATCATGAGACACACCTCGGCTGCAAGATCCTTCAATGAAGTACATGCAAGAAATGAC 1560
QY 1561 GGTCCCTGGGGGCTGCCGGCAGACTGGAATTTGGCTGGTCCCTCCATGTCTGGAGCA 1620
Db 1561 GGTCCCTGGGGGCTGCCGGCAGACTGGAATTTGGCTGGTCCCTCCATGTCTGGAGCA 1620
QY 1621 TCACCCCGTGTTCACAGAGATGCTGAACATACCTGCTGCTGCTTCTACTATATC 1680
Db 1621 TCACCCCGTGTTCACAGAGATGCTGAACATACCTGCTGCTGCTTCTACTATATC 1680
QY 1681 AGGTAGAGGCTTGGAAAACCATGTCTGGCAGAGCAGAAAGCGGAGAACCCAGAGAGAG 1740
Db 1681 AGGTAGAGGCTTGGAAAACCATGTCTGGCAGAGCAGAAAGCGGAGAACCCAGAGAGAG 1740
QY 1741 AGATTCATGTAAGTCTTGTGTAAGCTGTGCTCTTGTGCTGTATGCTGATGCCAGGA 1800
Db 1741 AGATTCATGTAAGTCTTGTGTAAGCTGTGCTCTTGTGCTGTATGCTGATGCCAGGA 1800
QY 1801 CAATGGCGTCCGAGTCAGAGTACCATCTCTTTCGACAGAGAGAGAGAAATAGAGAG 1860
Db 1801 CAATGGCGTCCGAGTCAGAGTACCATCTCTTTCGACAGAGAGAGAGAGAAATAGAGAG 1860
QY 1861 CGTGGCTTGGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA 1920
Db 1861 CGTGGCTTGGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA 1920
QY 1921 TGGATTAAGTACAGGCTGCTGCTGGAGAGAGAGAGGCTGCTGTTGCTGACAGCTGA 1980
Db 1921 TGGATTAAGTACAGGCTGCTGCTGGAGAGAGAGAGGCTGCTGTTGCTGACAGCTGA 1980
Db 1921 TGGATTAAGTACAGGCTGCTGCTGGAGAGAGAGAGGCTGCTGTTGCTGACAGCTGA 1980
QY 1981 CGTTTGGCAATGAGACTGCCCCGCAATGGAGAGAAATGGAATGCTCTTCAATGC 2040
Db 1981 CGTTTGGCAATGAGACTGCCCCGCAATGGAGAGAAATGGAATGCTCTTCAATGC 2040
QY 2041 TGAAGAGCTTACACAAATTAATGAGTACCTGTGTTGGCTCGGCTCCAGCATGTAC 2100
Db 2041 TGAAGAGCTTACACAAATTAATGAGTACCTGTGTTGGCTCGGCTCCAGCATGTAC 2100
QY 2101 CTGAGTCTGCGGCTTGTGTCATGACATGTATGAGAAAGTGTGCTGCTGCTGCTGCTGCT 2160
Db 2101 CTGAGTCTGCGGCTTGTGTCATGACATGTATGAGAAAGTGTGCTGCTGCTGCTGCTGCT 2160
QY 2161 AGCTTACCCCGAGTGGGAGAGAGGAGTATGAGTACAGTGGGCGAGAGAGGCTTCCGAGCT 2220
Db 2161 AGCTTACCCCGAGTGGGAGAGAGGAGTATGAGTACAGTGGGCGAGAGAGGCTTCCGAGCT 2220
QY 2221 GGGCGGTGCAACCTTTCAGAGGACGCTGTGACGCTTGTATGCTGCGAGGCAACAGCACA 2280
Db 2221 GGGCGGTGCAACCTTTCAGAGGACGCTGTGACGCTTGTATGCTGCGAGGCAACAGCACA 2280
QY 2281 TTGAGATCCCAAGCTCTACACCTCCATGTGACCTGGGACCGGACCACTACAGGCTCG 2340
Db 2281 TTGAGATCCCAAGCTCTACACCTCCATGTGACCTGGGACCGGACCACTACAGGCTCG 2340
QY 2341 TGCAGAGCTCAGAGCTTGTGAGACTGAGCAAAAGCCCTCAGACAGATGACAGCAAGAG 2400
Db 2341 TGCAGAGCTCAGAGCTTGTGAGACTGAGCAAAAGCCCTCAGACAGATGACAGCAAGAG 2400
QY 2401 TGTTCACATGAGGCTCAATATCTGCGGAGATCTCAAAAGTCCGACATCCAGCTGCGCA 2460
Db 2401 TGTTCACATGAGGCTCAATATCTGCGGAGATCTCAAAAGTCCGACATCCAGCTGCGCA 2460
QY 2461 CCATCTGCTGGAATCTCTCTGTGAGATGGCCAAAGCCCTGGAACATCTGCGGGGAGC 2520
Db 2461 CCATCTGCTGGAATCTCTCTGTGAGATGGCCAAAGCCCTGGAACATCTGCGGGGAGC 2520
QY 2521 ACCCTGGGCTTGGCCAGGACCAAGCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2580
Db 2521 ACCCTGGGCTTGGCCAGGACCAAGCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2580
QY 2581 TGGATGGCCCAACACCCACAGACAGTGGCTGAGAGACTGAGATGAGATGAGTGGACCT 2640
Db 2581 TGGATGGCCCAACACCCACAGACAGTGGCTGAGAGACTGAGATGAGATGAGTGGACCT 2640
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Db 2641 ACTGGGTGATGATCAAGAGGCTGCCCCCTGCTACTAGCCAGGCTCCTACACTATCC 2700
QY 2701 CGGACATGACGACCCCAACCCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2760
Db 2701 CGGACATGACGACCCCAACCCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2760
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QY 2821 AGTTTACCAACAGGCCCCCATCTTCCGAGAGTGTGAAGCCAGAGTGTATCTCATCAGCT 2880
Db 2821 AGTTTACCAACAGGCCCCCATCTTCCGAGAGTGTGAAGCCAGAGTGTATCTCATCAGCT 2880
QY 2881 CTGCTGGCTTCTCTTCCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2940
Db 2881 CTGCTGGCTTCTCTTCCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2940
QY 2941 CTTCCCGGATCAGAGCCCAAGAGATCCACTGAGTGTGCGGCTGCTGCTGCTGCTGCTGCT 3000
Db 2941 CTTCCCGGATCAGAGCCCAAGAGATCCACTGAGTGTGCGGCTGCTGCTGCTGCTGCTGCT 3000
QY 3001 CCGGAGATGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3060
Db 3001 CCGGAGATGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3060

QY 3061 AGCCCAAGAGCCAGTGGCTGCTTTGTGGGAAATGCCAGGCGCTTCCACTCCCGAGG 3120
 DB 3061 AGCCCAAGAGCCAGTGGCTGCTTTGTGGGAAATGCCAGGCGCTTCCACTCCCGAGG 3120
 QY 3121 ATCCCTCCCATCCTTGCATCTCCATCGGGGCTGSCACAGGGAATGGTGGCTTCCGCACTT 3180
 DB 3121 ATCCCTCCCATCCTTGCATCTCCATCGGGGCTGSCACAGGGAATGGTGGCTTCCGCACTT 3180
 QY 3181 TGTGGAGCAAGCGGCTCCATGACTCCACAGCAGAGGAGTGGGGAGGCGCGATGACTT 3240
 DB 3181 TGTGGAGCAAGCGGCTCCATGACTCCACAGCAGAGGAGTGGGGAGGCGCGATGACTT 3240
 QY 3241 TGGTGTGGTGGTGGCGCGCGCGCGAGATGAGAGACCATCTACAGAGAGAGATGCTGGAGA 3300
 DB 3241 TGGTGTGGTGGTGGCGCGCGCGCGAGATGAGAGACCATCTACAGAGAGAGATGCTGGAGA 3300
 QY 3301 TGGGCCAGAGAGGGGTGCTGATGCGGTGCACACAGACCTATCCCGCTGCTGGCAAGC 3360
 DB 3301 TGGGCCAGAGAGGGGTGCTGATGCGGTGCACACAGACCTATCCCGCTGCTGGCAAGC 3360
 QY 3361 CCAAGGTCTATGTTTCAGACATCTCTGCGCAGCAGCTGCGCACGAGGTCTCTCGTGGC 3420
 DB 3361 CCAAGGTCTATGTTTCAGACATCTCTGCGCAGCAGCTGCGCACGAGGTCTCTCGTGGC 3420
 QY 3421 TCCACAGAGAGCCAGGCGCAGCTCTATGTTGGGGGATGTCGCGCATGGCGCGGAGACGTGG 3480
 DB 3421 TCCACAGAGAGCCAGGCGCAGCTCTATGTTGGGGGATGTCGCGCATGGCGCGGAGACGTGG 3480
 QY 3481 CCCACACCCCTGAGACAGCTGTGTGCTGCCAAGCTGAATTAATGAGAGACAGGTGAGG 3540
 DB 3481 CCCACACCCCTGAGACAGCTGTGTGCTGCCAAGCTGAATTAATGAGAGACAGGTGAGG 3540
 QY 3541 ACTATTTCTTTGAGCTCAGAGAGCCAGAGCGCTATACAGAGATATCTTGGGTCTAT 3600
 DB 3541 ACTATTTCTTTGAGCTCAGAGAGCCAGAGCGCTATACAGAGATATCTTGGGTCTAT 3600
 QY 3601 TTCTCTACAGAGCGGAGAGAGACAGGAGGTGGGTGACAGCCAGCAGCTGGAGATGTCA 3660
 DB 3601 TTCTCTACAGAGCGGAGAGAGACAGGAGGTGGGTGACAGCCAGCAGCTGGAGATGTCA 3660
 QY 3661 CGCTCTGAGGCGCTACAGAGAGGGGTTAAAGCTCCCGCAGAGAACTTAAGATGAGGCCA 3720
 DB 3661 CGCTCTGAGGCGCTACAGAGAGGGGTTAAAGCTCCCGCAGAGAACTTAAGATGAGGCCA 3720
 QY 3721 GCTGTGATTAATCTGAGGTACAGAGGCGCTGGGAGATGAGAGAAAGTATATCCCGAGC 3780
 DB 3721 GCTGTGATTAATCTGAGGTACAGAGGCGCTGGGAGATGAGAGAAAGTATATCCCGAGC 3780
 QY 3781 CTCAGTCTTATTTCTCAACAGTGTGCTCCCATCAGCCCTTTACTGACCTCTCAACAA 3840
 DB 3781 CTCAGTCTTATTTCTCAACAGTGTGCTCCCATCAGCCCTTTACTGACCTCTCAACAA 3840
 QY 3841 GTACAGCCTTGATGATGAGAGCGCTCTCTCAAACTGGGCGCTCCCTGGTCCCTTGG 3900
 DB 3841 GTACAGCCTTGATGATGAGAGCGCTCTCTCAAACTGGGCGCTCCCTGGTCCCTTGG 3900
 QY 3901 AGACAAATCTTAAATGCGAGCGCTGGGAGTGGGTGAAGATGAATCTGCTGAGT 3960
 DB 3901 AGACAAATCTTAAATGCGAGCGCTGGGAGTGGGTGAAGATGAATCTGCTGAGT 3960
 QY 3961 GCACCACTTCAAGTACAGCAGAGAGTGTATGCGACCACTGTGTATTTAACTGCTTG 4020
 DB 3961 GCACCACTTCAAGTACAGCAGAGAGTGTATGCGACCACTGTGTATTTAACTGCTTG 4020
 QY 4021 TGTAAAGTATTTATGCTCTCTATTTAAAAAATCAACCAAGCTGTTCCTCCATGCGC 4080
 DB 4021 TGTAAAGTATTTATGCTCTCTATTTAAAAAATCAACCAAGCTGTTCCTCCATGCGC 4080
 QY 4081 ACTTGGGTCTTCCCTGTATGATCTCTGATGAGATATTTACATGAATGATGATTTACTT 4140
 DB 4081 ACTTGGGTCTTCCCTGTATGATCTCTGATGAGATATTTACATGAATGATGATTTACTT 4140

QY 4141 TAAATC 4145
 DB 4141 TAAATC 4145

RESULT 15
 US-09-543-679A-2509
 : Sequence 2509, Application us/09543679A
 : GENERAL INFORMATION:
 : APPLICANT: NYCE, Jonathan W.
 : TITLE OF INVENTION: LOW ADENOSINE ANTI-SENSE OLIGONUCLEOTIDE,
 : COMPOSITIONS, KIT & METHOD FOR TREATMENT
 : OF AIRWAY DISORDERS ASSOCIATED WITH
 : BRONCHOCONSTRICION, LONG INFLAMMATION,
 : NUMBER OF SEQUENCES: 3111
 : CORRESPONDENCE ADDRESS:
 : ADDRESSEE: EPIGENESIS PHARMACEUTICALS, INC.
 : STREET: 7 Clarke Drive
 : CITY: Cranbury
 : STATE: NJ
 : COUNTRY: USA
 : ZIP: 08512
 : COMPUTER READABLE FORM:
 : MEDIUM TYPE: CD-R
 : COMPUTER: IBM Compatible
 : OPERATING SYSTEM: DOS
 : SOFTWARE: N/A
 : CURRENT APPLICATION DATA:
 : APPLICATION NUMBER: US/09/543, 679A
 : FILING-DATE: 13-Apr-2000
 : CLASSIFICATION: UNKNOWN
 : PRIOR APPLICATION DATA:
 : APPLICATION NUMBER: 60/127, 958
 : FILING DATE: 1998-08-03
 : ATTORNEY/AGENT INFORMATION:
 : NAME: Amzel, Viviana
 : REGISTRATION NUMBER: 30, 930
 : REFERENCE/DOCKET NUMBER: EPI-0067191b
 : TELECOMMUNICATION INFORMATION:
 : TELEPHONE: 609-409-3035
 : TELEFAX: 413-254-9245
 : TELEX: <Unknown>
 : INFORMATION FOR SEQ ID NO: 2509:
 : SEQUENCE CHARACTERISTICS:
 : LENGTH: 9513 base pairs
 : TYPE: nucleic acid
 : STRANDEDNESS: single
 : TOPOLOGY: linear
 : SEQUENCE DESCRIPTION: SEQ ID NO: 2509:
 US-09-543-679A-2509
 Query Match 100.0%; Score 4145; DB 21; Length 9513;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CTGCTTAAATCTCTCGGCACTTGTATGAGGGAGTGGCAGTGTAGACAGTCCG 60
 DB 1292 CTGCTTAAATCTCTCGGCACTTGTATGAGGGAGTGGCAGTGTAGACAGTCCG 1351
 QY 61 AAGTTCAGAGCAGAGTCTCTCTGTTGACTGTCTTACCCTGGGAGGAGCATGTC 120
 DB 1352 AAGTTCAGAGCAGAGTCTCTCTGTTGACTGTCTTACCCTGGGAGGAGCATGTC 1411
 QY 121 AGCCAGTGCAGAGCCCAAGTGAAGACATCTGAGCTCAAAATCCAGATAGGACATTA 180
 DB 1412 AGCCAGTGCAGAGCCCAAGTGAAGACATCTGAGCTCAAAATCCAGATAGGACATTA 1471
 QY 181 GTGACCTGCTTTGTAAGCCATAGAGATGCTCTTGGAAATTTCTGTTCAAGACA 240
 DB 1472 GTGACCTGCTTTGTAAGCCATAGAGATGCTCTTGGAAATTTCTGTTCAAGACA 1531
 QY 241 AATTCCACAGTATGCAATGAGGAGAAAGACATCAACCAATGTGGAGAAAGCCG 300

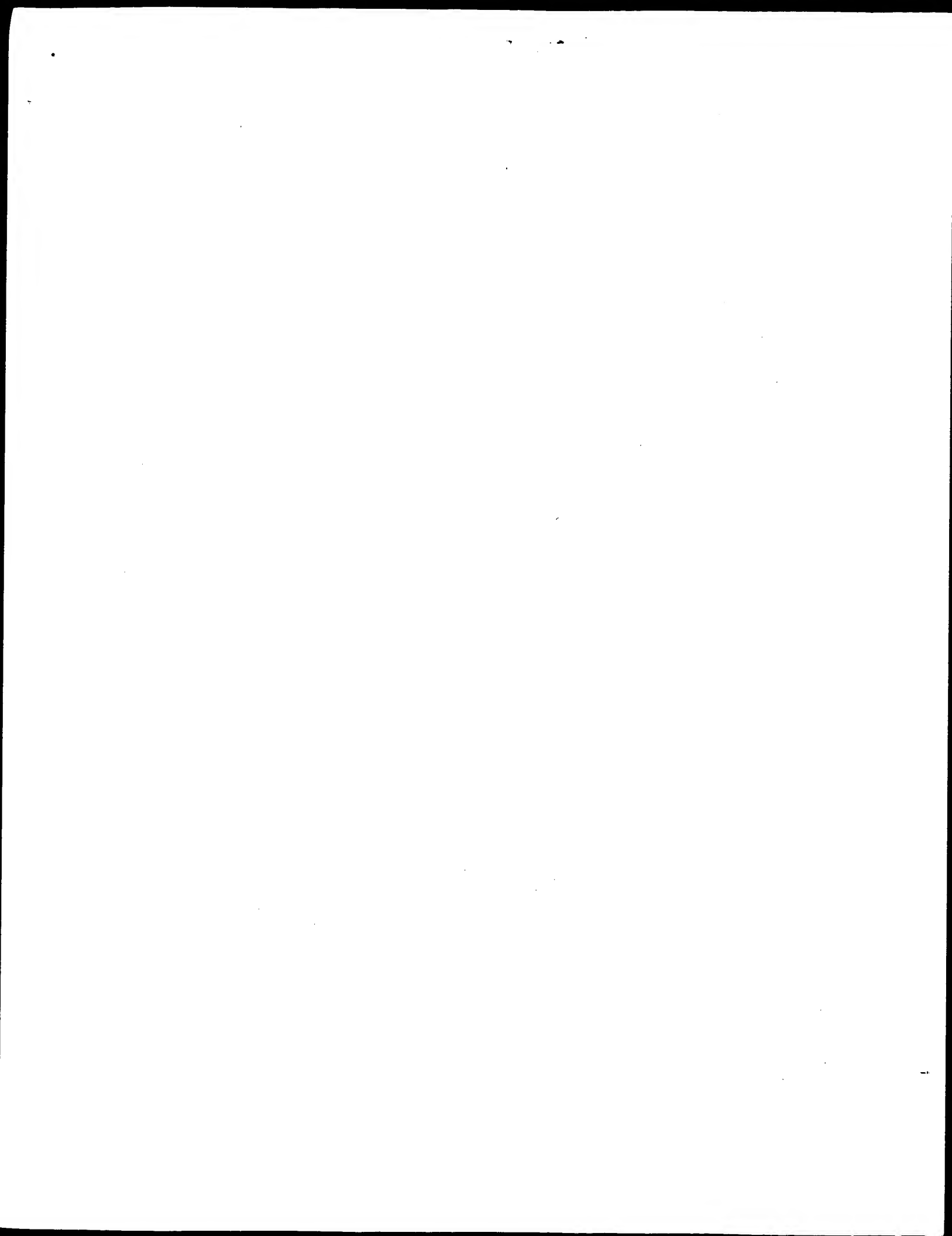
D	1532	AATTCACCAAGTATGCAATGAATGGGAAAAAGACATCAACAATGTGGAGAAAGCC	1591
Q	301	CCTGTGCACCTCCAGTCCAGTGCACAGATGACCTTCAATATACACACTCAGCAAC	360
D	1592	CCTGTGCACCTCCAGTCCAGTGCACAGATGACCTTCAATATACACACTCAGCAAC	1651
Q	361	AGCAGATGAGTCCCGCAGCCCTCGTGGAGAGCGGAAAGATGCTCCAGATCTCTGG	420
D	1652	AGCAGATGAGTCCCGCAGCCCTCGTGGAGAGCGGAAAGATGCTCCAGATCTCTGG	1711
Q	421	TCAGAGTGGATGCAACCCCATTTGCTCCACGCGCATGTGAGATCAAAAATCGGGCA	480
D	1712	TCAGAGTGGATGCAACCCCATTTGCTCCACGCGCATGTGAGATCAAAAATCGGGCA	1771
Q	481	GGGGGATGACTTTCACAGACACACTTACCAATAAGGCCAAAGGGATTTAACTTGAAGT	540
D	1772	GGGGGATGACTTTCACAGACACACTTACCAATAAGGCCAAAGGGATTTAACTTGAAGT	1831
Q	541	CCAAATCTTGGCTGGGTCCTATTTGACTCCAAAGTTTGACGAGAGACCCAGGGACA	600
D	1832	CCAAATCTTGGCTGGGTCCTATTTGACTCCAAAGTTTGACGAGAGACCCAGGGACA	1891
Q	601	AGCTTACCCCTCCAGATGAGCTTCTACCTCAGCTATGCAATTTGTCACCAATATTAG	660
D	1892	AGCTTACCCCTCCAGATGAGCTTCTACCTCAGCTATGCAATTTGTCACCAATATTAG	1951
Q	661	GCTCTCTTCAAGAGGCAAAATATAGAGACATCTGGCCAGGATGAAAGGGTAAACAAG	720
D	1952	GCTCTCTTCAAGAGGCAAAATATAGAGACATCTGGCCAGGATGAAAGGGTAAACAAG	2011
Q	721	AGATAGAAACAGAGAACTACCACTGAGGAGATGAGTCACTTCTGCGCACAAC	780
D	2012	AGATAGAAACAGAGAACTACCACTGAGGAGATGAGTCACTTCTGCGCACAAC	2071
Q	781	AGGCTTGGGCAATGCCCCACGCTGCAATGGAGATGCCAGTGGTCAACTGACAGTGT	840
D	2072	AGGCTTGGGCAATGCCCCACGCTGCAATGGAGATGCCAGTGGTCAACTGACAGTGT	2131
Q	841	TCGATGCGGCGACCTGCTGTCACCTGCGCGGGAATTTTAAACACATCTGACAGACGTG	900
D	2132	TCGATGCGGCGACCTGCTGTCACCTGCGCGGGAATTTTAAACACATCTGACAGACGTG	2191
Q	901	GTTACTCCACCAACATGAGCAATGAGTGGCCATCAGCGGTGTTCCCGCAGGAGTG	960
D	2192	GTTACTCCACCAACATGAGCAATGAGTGGCCATCAGCGGTGTTCCCGCAGGAGTG	2251
Q	961	ATGAGCAAGACGACTTCCGGGTGTGGAATGTGACGCTATCGGCTATGCTACCAAGA	1020
D	2252	ATGAGCAAGACGACTTCCGGGTGTGGAATGTGACGCTATCGGCTATGCTACCAAGA	2311
Q	1021	TCGCAATGGCAGCATCAGAGGGGACCTGCAAGTGGAAATTCATCACTGCTGATCG	1080
D	2312	TCGCAATGGCAGCATCAGAGGGGACCTGCAAGTGGAAATTCATCACTGCTGATCG	2371
Q	1081	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGTCCCTGCTGCTGAGGCA	1140
D	2372	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTTCGATGTGTCCCTGCTGCTGAGGCA	2431
Q	1141	ATGGCGGTGACCTGAGCTTCCGAATTCACCTGACCTTGTGCTTAAAGTGGCATGG	1200
D	2432	ATGGCGGTGACCTGAGCTTCCGAATTCACCTGACCTTGTGCTTAAAGTGGCATGG	2491
Q	1201	AACATCCCAAAATACGATGTGTTGCGGAATGAGACTAAAGTGGTAAAGCCCTGCTGAG	1260
D	2492	AACATCCCAAAATACGATGTGTTGCGGAATGAGACTAAAGTGGTAAAGCCCTGCTGAG	2551
Q	1261	TGGCCCAATGCTGCTTAAAGTGGGCGCTGAGATTCACAGGTTGCCCTTCAATGGCT	1320
D	2552	TGGCCCAATGCTGCTTAAAGTGGGCGCTGAGATTCACAGGTTGCCCTTCAATGGCT	2611
Q	1321	GATACATGGGCAAGAGATCGGAGTCCGGGACTTCTGTGAGAGTCCAGGCTACCAATCC	1380
D	2612	GATACATGGGCAAGAGATCGGAGTCCGGGACTTCTGTGAGAGTCCAGGCTACCAATCC	2671

Q	1381	TGAGAGAGTGGGCAAGAGATGGGCTGGAAAAAGCAGCAAGCTGGGCTGCTGGAAG	1440
D	2672	TGAGAGAGTGGGCAAGAGATGGGCTGGAAAAAGCAGCAAGCTGGGCTGCTGGAAG	2731
Q	1441	ACCAGGCTGTGTTGATGATCAACATTTGCTGATCCATAGTTTTCAGAGCAAGATGGA	1500
D	2732	ACCAGGCTGTGTTGATGATCAACATTTGCTGATCCATAGTTTTCAGAGCAAGATGGA	2791
Q	1501	CCATCATGAGACCAACCACTGGGCGCAAGATTCCTCATGAGTACATGAGATGATACC	1560
D	2792	CCATCATGAGACCAACCACTGGGCGCAAGATTCCTCATGAGTACATGAGATGATACC	2851
Q	1561	GCTCCGTTGGGCGCTGCCCGGCAAGATTTGGCTGGTCCCTCCATGCTGGAGCA	1620
D	2852	GCTCCGTTGGGCGCTGCCCGGCAAGATTTGGCTGGTCCCTCCATGCTGGAGCA	2911
Q	1621	TCACCCCGTGTTCACAGAGATGCTGAACTAGCTGCTGCTGCTTCTACTACTATC	1680
D	2912	TCACCCCGTGTTCACAGAGATGCTGAACTAGCTGCTGCTGCTTCTACTACTATC	2971
Q	1681	AGGTAGAGGCTTGAAAAACCATGCTGGCAGAGACGAGAACGAGACCCAAAGAAAG	1740
D	2972	AGGTAGAGGCTTGAAAAACCATGCTGGCAGAGACGAGAACGAGACCCAAAGAAAG	3031
Q	1741	AGATTCATTTGAAGTCTTGGTCAAGAGCTGTGCTCTTTCCTGTATGCTGTCGCAAGA	1800
D	3032	AGATTCATTTGAAGTCTTGGTCAAGAGCTGTGCTCTTTCCTGTATGCTGTCGCAAGA	3091
Q	1801	CAATGCGCTCCCGAGTACAGATCAACATCCTTGTGGACAGAGACGAGAAATCAAGG	1860
D	3092	CAATGCGCTCCCGAGTACAGATCAACATCCTTGTGGACAGAGACGAGAAATCAAGG	3151
Q	1861	CGCTGGCTGGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCAGGTTGTGCA	1920
D	3152	CGCTGGCTGGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCAGGTTGTGCA	3211
Q	1921	TGATTAAGTACAGCTGAGCTGCTGGAGAGAGAGGCTGCTGCTGCTGCTGCAAGTA	1980
D	3212	TGATTAAGTACAGCTGAGCTGCTGGAGAGAGAGGCTGCTGCTGCTGCTGCAAGTA	3271
Q	1981	CGTTTGGCAATGAGACTGCCCTGGCAATGAGAGAACTGAAGAAATCCTCTTATGC	2040
D	3272	CGTTTGGCAATGAGACTGCCCTGGCAATGAGAGAACTGAAGAAATCCTCTTATGC	3331
Q	2041	TGAAGAGCTCAACAAACAAATTCAGTACGCTGTGTTGGCTGCTGCTGCTGATGC	2100
D	3332	TGAAGAGCTCAACAAACAAATTCAGTACGCTGTGTTGGCTGCTGCTGCTGATGC	3391
Q	2101	CTCGGTTCTGCGCTTGTGCTCATGATGATCAGAGAGTGTCCCACTGGGGGCTCTC	2160
D	3392	CTCGGTTCTGCGCTTGTGCTCATGATGATCAGAGAGTGTCCCACTGGGGGCTCTC	3451
Q	2161	AGCTCACCCCGATGAGGAGAAAGGAGATGAGCTCAGTGGGCGAGAGAGAGCCCTCCAGCT	2220
D	3452	AGCTCACCCCGATGAGGAGAAAGGAGATGAGCTCAGTGGGCGAGAGAGAGCCCTCCAGCT	3511
Q	2221	GGGCGGTGCAAACTTCAAGGAGAGCTGTGAGAGTTGATGTGCGAAGGCAAAACAGACA	2280
D	3512	GGGCGGTGCAAACTTCAAGGAGAGCTGTGAGAGTTGATGTGCGAAGGCAAAACAGACA	3571
Q	2281	TTCAAGATCCCAAGCTCTACACTGCAATGTGACTGGGACCCGACCACTAGAGCTG	2340
D	3572	TTCAAGATCCCAAGCTCTACACTGCAATGTGACTGGGACCCGACCACTAGAGCTG	3631
Q	2341	TGAGAGACTCAGAGCTTTGAGACTCAGCAAGAGCTCTCAGCAGATGATGCCAAGACG	2400
D	3632	TGAGAGACTCAGAGCTTTGAGACTCAGCAAGAGCTCTCAGCAGATGATGCCAAGACG	3691
Q	2401	TGTTCAACATGAGAGCTCAATCTCGGCAAGATCTACAAAGTCCGAGATCAGCGGCA	2460
D	3692	TGTTCAACATGAGAGCTCAATCTCGGCAAGATCTACAAAGTCCGAGATCAGCGGCA	3751

Oy 2461 CCATCTGTGTGACTCTCTGTGTGAGATGCGCAAGGCTTGAACCTACTCTGCGGGGGAGC 2520
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 Db 4472 TCTGGCAGCAAGGCTCTCATGACTCCAGCACAAGGAGTGCAGGAGGCGCGCATGACCT 4531
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 Db 4772 CCCACACCTGTAAGCAGCTGTGTGCTCCAAAGCTGAATGAATGAGAGAGAGTGTGAGG 4831
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 Oy 3601 TTCCTTACGAGGCGAAGAGACAGAGGTGGCGGTGTGACAGCCAGCTGTGAGATGTGAG 3660
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 Db 4892 TTCCTTACGAGGCGAAGAGACAGAGGTGGCGGTGTGACAGCCAGCTGTGAGATGTGAG 4951
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 Db 5012 GCTCTGATTTATCTGAGGTGACAGGGGCTGTGGGAGATGAGAGAACTGATATCCCCAGC 5071
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 Oy 3781 CTCAAGTCTTATTTCTTCAACGTTGCTGCCATCAGCCCTTACTTACTTGACTCTTAAACA 3840
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 Db 5372 ACTTGGGTCTTCCCTGTATGATTCCTTGTATGAGATATTTACATGAATGTGATTTACTT 5431
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 Db 5432 TTAATC 5436
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Search completed: March 14, 2003, 15:55:55
 Job time : 8519 secs



QY	2742	CTTCCCAGAGTGGCCACACAAAGAGCTTAGAGACAGAGAGCGTGGAGGCGCTTGTCACAGGCC	2801
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QY	2802	TCAGAGTACAGCAAGTGGAAAGTTCCACCAAGAGCCCAATTCCTCGAAGTGTCTAGAGAG	2861
Db	2701	TCAGAGTACAGCAAGTGGAAAGTTTCACCAAGAGCCCAATTCCTGGAGTGTCTAGAGAG	2760
QY	2862	TTTCCCGTCCCTGGGGGTGTCTGCTGGCTTCTGCTTTTCCAGCTTCCCATTTCTGAAGCC	2921
Db	2761	TTTCCCGTCCCTGGGGGTGTCTGCTGGCTTCTGCTTTTCCAGCTTCCCATTTCTGAAGCC	2820
QY	2922	AGGTTCTACGCCCTCAGCTGCTCTCCCGGAGTACACAGGCCAGAGATCCACTGACTGTG	2981
Db	2821	AGGTTCTACTCCATCAGCTGCTCTCCCGGATTCACAGGCCAAGAGATTCACATGACTGTG	2880
QY	2982	GCCGTGGTCACTTACCACACCGAGATGGCCAGGGTCCCTGACACCAAGGTGTCTGCAGC	3041
Db	2881	GCGGTGTCACTTACCACACCGAGATGGCCAGGGTCCCTGACACCAAGGGTGTCTGCAGC	2940
QY	3042	ACATGGTCAACAGCCTGTAAGGCCCAAGAGCCAGTGGCCCTTTGGTGGCAATAGCCAGC	3101
Db	2941	ACATGGGTCAACAGCCTGTAAGGCCCAAGAGCCAGTGGCCCTTTGTGGCAATAGCCAGC	3000
QY	3102	GCCTTCCACCTCCCGCAGAGATCCCTCCATCCCTTGTCATCTCATCAGGGCTGGCACAGCC	3161
Db	3001	GGCTTCCACCTCCCGCAGAGATCCCTCCATCCCTTGTCATCTCATCAGGGCTGGCACAGCC	3060
QY	3162	ATGCTGCGCTTTCGGCAGTTCCTTGGCAGCAAGCGTCCATAGTATCCCAAGCAAGGAGTG	3221
Db	3061	ATTCGCGCCCTTCGGCAGTTCCTTGGCAGCAAGCGTCCATAGTATCCCAAGCAAGGAGTG	3120
QY	3222	CGGGAGAGCCCGCATGTACCTTGTGTGGTCCCGCCGCGCCAGATGAGAGACCATCTTAC	3281
Db	3121	CGGGAGAGCCCGCATGTACCTTGTGTGGTCCCGCCGCGCCAGATGAGAGACCATCTTAC	3180
QY	3282	CAGAGAGAGATGCTGGAGATGGCCCGAAGAGGGGGTGTGTCATGGGGTGCACACAGCTAT	3341
Db	3181	CAGAGAGAGATGCTGGAGATGGCCCGAAGAGGGGGTGTGTCATGGGGTGCACACAGCTAT	3240
QY	3342	TCCCGCTGCGTGGCAAGCCCAAGGTCATATGTTTCAAGGATCCTCGGACACACTGGCC	3401
Db	3241	TCCCGCTGCGTGGCAAGCCCAAGGTCATATGTTTCAAGGATCCTCGGACACACTGGCC	3300
QY	3402	AGCGAGGTGCTCGTGTGTCCTCAACAGAGGCCACGCTTATGTTTGGGGGATGTG	3461
Db	3301	AGCGAGGTGCTCGTGTGTCCTCAACAGAGGCCACGCTTATGTTTGGGGGATGTG	3360
QY	3462	CGCATGGCGCGGGAGCTGGGCCACACCCGTAAGACACTGGTGGCTGCCAAGCTGAAATTG	3521
Db	3361	CGCATGGCGCGGGAGCTGGGCCACACCCGTAAGACACTGGTGGCTGCCAAGCTGAAATTG	3420
QY	3522	AATGAGAGCAGTGCAGAGCATTTTCTTTCAGCTCAAGGCCAGAGAGCGCTATTCAGAA	3581
Db	3421	AATGAGAGCAGTGCAGAGCATTTTCTTTCAGCTCAAGGCCAGAGAGCGCTATTCAGAA	3480
QY	3582	GATATCTTCGGTGTGTATTTCTCTTTCAGAGGGCAAGAGAGAGGTTGGCGTGCAGGCC	3641
Db	3481	GATATCTTGTGTGTATTTCTCTTTCAGAGGGCAAGAGAGAGGTTGGCGTGCAGGCC	3540
QY	3642	AGCAGCCCTGAGATGTACGGCGCTCTGAGGGCCCTACAGAGAGGGTTAAAGCTGCGGCACA	3701
Db	3541	AGCAGCCCTGAGATGTACGGCGCTCTGAGGGCCCTACAGAGAGGGTTAAAGCTTCCGCGACA	3600
QY	3702	GAACTTAAGATTGAAGCCACTCTGCATTTCTTGAGGTCAAGAGGGCTGGGGAGATGGAG	3761
Db	3601	GAACTTAAGATTGAAGCCACTCTGCATTTCTTGAGGTCAAGAGGGCTGGGGAGATGGAG	3660
QY	3762	GAAATGTATATCCCCCAGAGCTCAAGTTTATTTCTTCAACAGTGTGCTCCCATCAAGCCCT	3821
Db	3661	GAAATGTATATCCCCCAGAGCTCAAGTTTATTTCTTCAACAGTGTGCTCCCATCAAGCCCT	3720
QY	3822	TTACTTGAAGCTCTTACACAGTAGACACCCCTGGATTGATGGAGGCTCTCTCTCAACATGG	3881

Db	3721	TTACTTACCTCCCTAAACAAGTACACCTCGATGTATGAGGAGACCTCTCTCTCTCAAACTGG	3780
Qy	3882	GGCCTCCCTGTCCTCTTGAGACAAAATCTTAAATGCCAGGCTCTGGCGATGGGTGAAG	3941
Db	3781	GGCCTCCCTGGTCCCTTGAGACAAAATCTTAAATGCCAGGCTCTGGCAAGTGGTGAAG	3840
Qy	3942	ATGGAATCTCTGTGTAGTGCACCACTTCAAGTACGACACAGAGAGTCTATCGCACAC	4001
Db	3841	ATGGAATCTCTGTGTAGTGCACCACTTCAAGTACGACACAGAGAGTGTATCGCACAC	3900
Qy	4002	TGTGTATTTAACTGCCTTGTGTACAGTATTTATGCTCTGTATTTAAAAAACTAACCC	4061
Db	3901	TGTGTATTTAACTGCCTTGTGTACAGTATTTATGCTCTGTATTTAAAAAACTAACCC	3960
Qy	4062	CAGCTGTGCCCATGGCCACTGGGTCCTCCCTGATCATTCCTTGATGAGGATATTTA	4121
Db	3961	CAGCTGTGCCCATGGCCACTGGGTCCTCCCTGATCATTCCTTGATGAGGATATTTA	4020
Qy	4122	CATGAATTTGCATTTTAACTTAAATC	4145
Db	4021	CATGAATTTGCATTTTAACTTAAATC	4044

	RESULT 2	
	US-10-049-428-3	
	; Sequence 3, Application US/10049428	
	; GENERAL INFORMATION:	
	; APPLICANT: Charles; Ian G.	
	; APPLICANT: Xu, Weiming	
	; APPLICANT: Liu, Lizhi	
	; TITLE OF INVENTION: Undruggible Screen for Drug Discovery	
	; FILE REFERENCE: HO-P02380US0	
	; CURRENT APPLICATION NUMBER: US/10/049, 428	
	; CURRENT FILING DATE: 2000-07-28	
	; PRIOR APPLICATION NUMBER: GB 9918077	
	; PRIOR FILING DATE: 1999-07-30	
	; PRIOR APPLICATION NUMBER: GB 0016171.1	
	; PRIOR FILING DATE: 2000-06-30	
	; NUMBER OF SEQ ID NOS: 7	
	; SOFTWARE: PatentIn version 3.1	
	; SEQ ID NO 3	
	; LENGTH: 3678	
	; TYPE: DNA	
	; ORGANISM: Human	
	US-10-049-428-3	
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DY	20 CTGCTTTAAATCTCTCGGCACACTTTGATGAAGGGACTGGCAGTTCATGACATCCCG	79
DY	61 AAGTTCACAGGACAGGTCTCTCTCGTTGACTGTCCTTAACCCCGGAGGAGTGTC	120
DY	80 AAGTTCACAGGACAGGTCTCTCTCGTTGACTGTCCTTAACCCCGGAGGAGTGTC	139
DY	121 AGCCAGCTGCAGGCCCAAGTGAATAAACAATCTGACTCAAAATCCAGATAGAATATA	180
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DY	181 GTGACCTGCTTTGTAAGCATAGAGATGGCCCTGTCTTGGAATTTCTGTTCAAGACA	240
DY	200 GTACCTGCTTTGTAAGCATAGAGATGGCCCTGTCTTGGAATTTCTGTTCAAGACA	259
DY	241 AATTCCACCAAGTATGCAATGATGGGAAAAAGACATCAACAACATGTGSGAAAAGCCC	300
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DY	301 CCTGTGCACCTCACATGACAGAGATGACCTTCAGTATCAACACTCAGCAAGC	360

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Qy 361 AGCAGATAGTCCCGGAGCCCTCTGTGGAGAGGGAAAGTCTCCAGATCTCTGG 420
Db 380 AGCAGATAGTCCCGGAGCCCTCTGTGGAGAGGGAAAGTCTCCAGATCTCTGG 439
Qy 421 TCAAGCTGATCAACCCCATTTGTCTCCCAAGCATGTGAGATCAAAAGTGGGCA 480
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Qy 2401 TGTTCACATGAGGCTCAAAATCTCGGAGAAATTCACAAAGTCCGACATCCAGCGTGCA 2460
Db 2420 TGTTCACATGAGGCTCAAAATCTCGGAGAAATTCACAAAGTCCGACATCCAGCGTGCA 2479
Qy 2461 CCATCTGCTGGAGACTCTCCCTGTGAGAGATGGGCAAGGCTGAGTACCTGCGGGGAGC 2520
Db 2480 CCATCTGCTGGAGACTCTCCCTGTGAGAGATGGGCAAGGCTGAGTACCTGCGGGGAGC 2539


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OY 2521 ACCTTGGGTTTGGCCAGGCAACAGCCGCCCTGGTCCAAAGGATCTGGAGCGAGTGG 2580
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DB 2540 ACCTTGGGGTTTGGCCAGGCAACAGCGGCCCTGGTCCAAAGTATCTGGAGCGAGTGG 2599
OY 2581 TGGATGAGCCCAACACCCCAAGAGAGTGGCTGGAGAGCTGGATGAGATGGCAGCT 2640
    |||||||
DB 2600 TGGATGAGCCCAACACCCCAAGAGAGTGGCTGGAGAGCTGGATGAGATGGCAGCT 2659
OY 2641 ACTGGGTGAGTGAACAAGAGGCTGGCCCCCTGGTCACTAGCAGGAGCCCTCACTACTCC 2700
    |||||||
DB 2660 ACTGGGTGAGTGAACAAGAGGCTGGCCCCCTGGTCACTAGCAGGAGCCCTCACTACTCC 2719
OY 2701 CGGACATCAACACACCCCAAGAGTGGCTGGTCCAAAGGCTGGAGGAGGAGGAGCAG 2760
    |||||||
DB 2720 TGGACATCAACACACCCCAAGAGTGGCTGGTCCAAAGGCTGGAGGAGGAGGAGCAG 2779
OY 2761 AAGAGCTGAGAGACAGAGAGTGGAGAGCCCTGGTCCAGGAGCTGAGAGTACAGCAAGTGA 2820
    |||||||
DB 2780 AAGAGCTGAGAGACAGAGAGTGGAGAGCCCTGGTCCAGGAGCTGAGAGTACAGCAAGTGA 2839
OY 2821 AGTTCAACCAACAGCCCAATCTCTGAGAGTGTAGAGAGTTCCTGCTGGAGTGT 2880
    |||||||
DB 2840 AGTTCAACCAACAGCCCAATCTCTGAGAGTGTAGAGAGTTCCTGCTGGAGTGT 2899
OY 2881 CTGCTGGCTCTCTGCTTCCAGCTCCCACTTCTGAAGCCAGGTTCTACTCATGAGCT 2940
    |||||||
DB 2900 CTGCTGGCTCTCTGCTTCCAGCTCCCACTTCTGAAGCCAGGTTCTACTCATGAGCT 2959
OY 2941 CTTCCGGGATCACAGCGCCCAAGAGATCACTGAGTGGCTGGTACCTTACCTACACA 3000
    |||||||
DB 2960 CTTCCGGGATCACAGCGCCCAAGAGATCACTGAGTGGCTGGTACCTTACCTACACA 3019
OY 3001 CCGGAGATGGCCAGGCTCCCTGACAGCGTGTGAGAGCATAGGCTCAACAGCTGA 3060
    |||||||
DB 3020 CCGGAGATGGCCAGGCTCCCTGACAGCGTGTGAGAGCATAGGCTCAACAGCTGA 3079
OY 3061 AGCCCCAAGACAGAGTGGCTGTGTGGAGATGGCAGCGCTTCCACTCCAGAG 3120
    |||||||
DB 3080 AGCCCCAAGACAGAGTGGCTGTGTGGAGATGGCAGCGCTTCCACTCCAGAG 3139
OY 3121 ATCCCTCCATCTTGTGATCTCTATCGGCTGGCAGAGCATGTCCTTCCGAGTT 3180
    |||||||
DB 3140 ATCCCTCCATCTTGTGATCTCTATCGGCTGGCAGAGCATGTCCTTCCGAGTT 3199
OY 3181 TCTGGAGAGAGGCTGATGATCCAGCAACAGAGAGTGGGAGGAGCGGATGACT 3240
    |||||||
DB 3200 TCTGGAGAGAGGCTGATGATCCAGCAACAGAGAGTGGGAGGAGCGGATGACT 3259
OY 3241 TGTGTGTGGTGGCGCGCCAGATGAGAGCAATCTACAGAGAGATGCTGGAGA 3300
    |||||||
DB 3260 TGTGTGTGGTGGCGCGCCAGATGAGAGCAATCTACAGAGAGATGCTGGAGA 3319
OY 3301 TGGGCCAGAGAGGCTGTGATCGGTGACACAGCTTATCCCGGCTGCTGGCAGC 3360
    |||||||
DB 3320 TGGGCCAGAGAGGCTGTGATCGGTGACACAGCTTATCCCGGCTGCTGGCAGC 3379
OY 3361 CCAAGGCTATGTCAGAGATCTGCGGAGAGCTGCGCAGGAGGAGTCTCGGTGC 3420
    |||||||
DB 3380 CCAAGGCTATGTCAGAGATCTGCGGAGAGCTGCGCAGGAGGAGTCTCGGTGC 3439
OY 3421 TCCACAAAGAGAGCGCCACTTATGTTTGGGAGATGTCGATGCCCCGGAGCTGG 3480
    |||||||
DB 3440 TCCACAAAGAGAGCGCCACTTATGTTTGGGAGATGTCGATGCCCCGGAGCTGG 3499
OY 3481 CCCACAGCTTAAAGAGTGGTGGCTGGCAAGTGAATTAAGAGAGAGAGTGGAGG 3540
    |||||||
DB 3500 CCCACAGCTTAAAGAGTGGTGGCTGGCAAGTGAATTAAGAGAGAGAGTGGAGG 3559
OY 3541 ACTATTTCTTACAGTCAAGAGCAGAGAGCTATCAAGAGATATCTTGGGCTGTAT 3600
    |||||||
DB 3560 ACTATTTCTTACAGTCAAGAGCAGAGAGCTATCAAGAGATATCTTGGTGTAT 3619
OY 3601 TTCTTACAGAGCGAAGAGAGAGGCTGGCGGTGACAGCCAGCCTGAGATGTCA 3659
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DB 3620 TTCTTACAGAGCGAAGAGAGAGAGGCTGGCGGTGACAGCCAGCAGCTGAGATGTCA 3678
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RESULT 3
US-10-210-682-1
: Sequence 1, Application US/10210682
: GENERAL INFORMATION:
: APPLICANT: Olson-Munoz, Marilyn C.
: APPLICANT: Donald, Glen
: TITLE OF INVENTION: Screening Nutraaceuticals
: FILE REFERENCE: FORS-07289
: CURRENT APPLICATION NUMBER: US/10/210,682
: PRIORITY FILING DATE: 2002-12-10
: PRIOR APPLICATION NUMBER: 60/309,279
: NUMBER OF SEQ ID NOS: 8
: SOFTWARE: PatentIn version 3.1
: SEQ ID NO 1
: LENGTH: 3855
: TYPE: RNA
: ORGANISM: Homo sapiens
US-10-210-682-1

Query Match      73.3%; Score 3039; DB 8; Length 3855;
Best Local Similarity 80.1%; Pred. No. 0;
Matches 3086; Conservative 753; Mismatches 16; Indels 0; Gaps 0;

OY 13 CTCTGGGACACCTTGTGATGAGGAGGAGCTGGGAGTCTGAGACAGTCCCAAGTCTCAAG 72
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DB 1 CUCUCGGCCACCUCUUGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 60
OY 73 CACAGGTCTCTCTGCTGTTGACTGCTTACCCCGGAGGAGGAGGAGGAGGAGGAGGAG 132
    |||||||
DB 61 CACAGGUCUUCUUGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 120
OY 133 GCGCCACAGTGAAGACATCTGAGTCAATATCAAGTAAAGTAAAGTAAAGTAAAGTAA 192
    |||||||
DB 121 GCGCCACAGTGAAGACATCTGAGTCAATATCAAGTAAAGTAAAGTAAAGTAAAGTAA 180
OY 193 GTAAAGCCATAGAGATGGCTGCTCTGTAATTTCTGTCAAGACCAATTTCCACAGT 252
    |||||||
DB 181 GAAAGCCATAGAGATGGCTGCTCTGTAATTTCTGTCAAGACCAATTTCCACAGT 240
OY 253 ATGCAATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 312
    |||||||
DB 241 AUGCAUUGAUGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 300
OY 313 CCAAGTCAAGTGAAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT 372
    |||||||
DB 301 CCAAGTCAAGTGAAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT 360
OY 373 CCGCGAGGCGCTGCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 432
    |||||||
DB 361 CCGCGAGGCGCTGCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 420
OY 433 CAAGCCATGTCCTCCCAAGGAGGAGTGAAGTCAAAACTGGGGAGGAGGAGTGAAGT 492
    |||||||
DB 421 CAAGCCATGTCCTCCCAAGGAGGAGTGAAGTCAAAACTGGGGAGGAGGAGTGAAGT 480
OY 493 TCCAAAGACACATCTGACCAATTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 552
    |||||||
DB 481 TCCAAAGACACATCTGACCAATTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 540
OY 553 TGGGGTCCATTATGACTCCCAAAAGTTTGAACAGAGAGGAGGAGGAGGAGGAGGAGGAG 612
    |||||||
DB 541 TGGGGTCCATTATGACTCCCAAAAGTTTGAACAGAGAGGAGGAGGAGGAGGAGGAGGAG 600
OY 613 CAGATGAGCTTCAAGTCAAGTATGAAATTTGTCAACCAATTTACGGCTCTTCAAG 672
    |||||||
DB 601 CAGATGAGCTTCAAGTCAAGTATGAAATTTGTCAACCAATTTACGGCTCTTCAAG 660
OY 673 AGGCAAAATTAAGAGAAACATCTGGCCAGGAGTGAAGAGGAGTGAAGAGGAGTGAAG 732
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Db 661 AGCCAAAAAAGAGAAACAVUCUGCCAGGUGGAAACGGUAAACAAAGAGAAUAGAAACAA 720
QY 733 CAGGAACCTAACAACAGAGGAGATGACCTACTCTTCGCCACAAAGAGGCGCTGGCGCA 792
Db 721 CAGUAAACCTAACAGAGGAGAGAGACUCUCCGCCACCAAGAGGCGCTGGCGCA 780
QY 793 ATGCCCCACGCTGATGGAGAGATCCAGTGTCTCAACTGAGAGTCTTCAATGCCGCA 852
Db 781 AUGCCTCCAGCUGCAUUGGAGAGAUCCAGUGGCAACCTGAGAGUCUCCAUUGCCCGCA 840
QY 853 GCGTCCCACTGCGCGGGAATGTTGAACACATCTGCAGACAGCTGGTACTCCACCA 912
Db 841 GCGUCCCACTGCGCGGGAATGTTGAACACATCTGCAGACAGCTGGTACTCCACCA 900
QY 913 ACAATGGCAATCAGAGTGCATACCTGTTCCCGGAGGAGTGTGTCAGAGAGCG 972
Db 901 ACAATGGCAATCAGAGTGCATACCTGTTCCCGGAGGAGTGTGTCAGAGAGCG 960
QY 973 ACTTCGGGTGTGGAATGCTCAGCTCAGCTCAGCTGCTGCTACCAAGATGCGAGTGA 1032
Db 961 ACUUCGCGGUGUGAAGUCACUCACUCCGUAUGUGGCUACAGAVGCCAGAUAGCA 1020
QY 1033 GCATCAGAGGAGGACCTGCAACGTGGAATTAATCTACCTGCTGCTGCTGCTGCTGCA 1092
Db 1021 GCATCAGAGGAGGACCTGCAACGTGGAATTAATCTACCTGCTGCTGCTGCTGCA 1080
QY 1093 AGCCCAAGTACGCGCTTCGATGATGTCCTCCCTGCTGCTGCTGCTGCTGCTGCTGCTG 1152
Db 1081 AGCCCAAGTACGCGCTTCGATGATGTCCTCCCTGCTGCTGCTGCTGCTGCTGCTGCTG 1140
QY 1153 CTGAGCTCTGCAATTCCTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1212
Db 1141 CTGAGCTCTGCAATTCCTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1200
QY 1213 ACAGTGTGTTGCGGAACTGAGAGTAAAGTGTGAGCTGAGCTGCTGCTGCTGCTGCTGCTG 1272
Db 1201 ACAGTGTGTTGCGGAACTGAGAGTAAAGTGTGAGCTGAGCTGCTGCTGCTGCTGCTGCTG 1260
QY 1273 TGCTTGAAGTGGGCGCTGAGAGTTCCTGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1332
Db 1261 UGCUUGAGGUGGCGCGCCUGGAGUCCAGGUGGCGCCUCCUCCUCCUCCUCCUCCUCCUCC 1320
QY 1333 CAGAGATGGAGTCCGGGACTTCTGTCAGCTGTCAGCTGTCAGCTGTCAGCTGTCAGCTGTC 1392
Db 1321 CAGAGATGGAGTCCGGGACTTCTGTCAGCTGTCAGCTGTCAGCTGTCAGCTGTCAGCTGTC 1380
QY 1393 GCAGGAGATGGGCTTGGAACGCAAGAGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1452
Db 1381 GCAGGAGATGGGCTTGGAACGCAAGAGTGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1440
QY 1453 TTGAGATCAACATTTGCTGTATGATGTTTTCAGAAAGCAAGATGTGACATCATGAGACC 1512
Db 1441 TTGAGATCAACATTTGCTGTATGATGTTTTCAGAAAGCAAGATGTGACATCATGAGACC 1500
QY 1513 ACCACATGGGCTGCAATCTCTCATGAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAA 1572
Db 1501 ACCACATGGGCTGCAATCTCTCATGAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAA 1560
QY 1573 GCTGCCGCGGAGACTGATTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1632
Db 1561 GCTGCCGCGGAGACTGATTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1620
QY 1633 TTACAGAGGAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAA 1692
Db 1621 TTACAGAGGAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAA 1680
QY 1693 GGAAGAACCTATGCTGAG 1752
Db 1681 GGAAGAACCTATGCTGAG 1740
QY 1753 AAGCTTGGTCAAGAGTGTGCTCTTCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGCT 1812
Db 1741 AAGCTTGGTCAAGAGTGTGCTCTTCTGCTGATGCTGATGCTGATGCTGATGCTGATGCTGCT 1800
QY 1813 GAGTCAAGTCAACATCTCTTTCGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1872
Db 1801 GAGTCAAGTCAACATCTCTTTCGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1860
QY 1873 ACCGCGGCGCTTATTCAGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1932
Db 1861 ACCGCGGCGCTTATTCAGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1920
QY 1933 GCGTGAAGTGTGAG 1992
Db 1921 GCGTGAAGTGTGAG 1980
QY 1993 GAGACTGCGCTGCGATGAG 2052
Db 1981 GAGACTGCGCTGCGATGAG 2040
QY 2053 ACAACAAATTCAGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2112
Db 2041 ACAACAAATTCAGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2100
QY 2113 CCTTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2172
Db 2101 CCTTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2160
QY 2173 TTGAGAGAGGAGATGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2232
Db 2161 TTGAGAGAGGAGATGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2220
QY 2233 CTTTCAAGGAGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2292
Db 2221 CTTTCAAGGAGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2280
QY 2293 AGCTTCAACCTTCAATGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 2352
Db 2281 AGCTTCAACCTTCAATGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 2340
QY 2353 AGCTTTCAGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 2412
Db 2341 AGCTTTCAGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 2400
QY 2413 GGTCTCAATTCCTGCGGAAATCTAACAAGTCCGACATCCAGCTGCTGCTGCTGCTGCTGCTG 2472
Db 2401 GGTCTCAATTCCTGCGGAAATCTAACAAGTCCGACATCCAGCTGCTGCTGCTGCTGCTGCTG 2460
QY 2473 AACTCTCTGATGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2532
Db 2461 AACTCTCTGATGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2520
QY 2533 GGCAGAGCAACAGCGGCGCTGTCAGAGGATGCTGGAAGGATGCTGGAAGGATGCTGGAAGG 2592
Db 2521 GGCAGAGCAACAGCGGCGCTGTCAGAGGATGCTGGAAGGATGCTGGAAGGATGCTGGAAGGAT 2580
QY 2593 CACCCACCAAGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2652
Db 2581 CACCCACCAAGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2640
QY 2653 ACAAGAGGCTGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2712
Db 2641 ACAAGAGGCTGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2700
QY 2713 CACCCCAACCAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2772
Db 2701 CACCCCAACCAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2760
QY 2773 GACAGAGGCTGAGGCGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2832
Db 2761 GACAGAGGCTGAGGCGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2820
QY 2833 GCCCACAATTCCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2892
Db 2821 GCCCACAATTCCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 2880

2893 TGCTTCCAGCTCCCATTCATGAGCCAGGTTCTACTCATGCTCTCCCGGATC 2952
2881 UGCUUUCACAGUCCCAUUCUUAAGCCAGGUCUUAUCCAUAGUCUCCCGGGAGUC 2940
2953 ACAGGCCACGAGATCCACCTGACTGTGGCCGTGTACCTTACACAGGAGATGACC 3012
2941 ACAGGCCACGAGATCCACCTGACTGTGGCCGTGTACCTTACACAGGAGATGACC 3000
3013 AGGTTCCCTGACACGAGGTGTCTGACAGACATGCTTACAGCTTGAAGCCCAAGAC 3072
3001 AGGTTCCCTGACACGAGGTGTCTGACAGACATGCTTACAGCTTGAAGCCCAAGAC 3060
3073 CAGTCCCTGCTTGTGGGAGATGAGACGCTTCCACCTCCCGAGATCCCTCCATC 3132
3061 CAGUCCCTGCTTGTGGGAGATGAGACGCTTCCACCTCCCGAGATCCCTCCATC 3120
3133 CTGTCATCTCATGAGGCTGCTGACAGAGGATCTGCTTCCGAGATTTCTGAGAGAC 3192
3121 CUGGACUCCUACUGGCGCCUGGACAGAGCAUCGCGCCUUCGCGAGUUCUGGAGAAC 3180
3193 GAGTCCATGACCTCCAGACAGAGGAGTGGGGAGGCGCGATGACCTTGTGTTGGT 3252
3181 GAGUCCACUCCUACUGGCGCCUGGACAGAGCAUCGCGCCUUCGCGAGUUCUGGAGAAC 3240
3253 GCGCGCGCCAGATGAGAGACCACTTACAGAGAGATGCTGAGATGAGGCGCCAGAG 3312
3241 GCGCGCGCCAGATGAGAGACCACTTACAGAGAGATGCTGAGATGAGGCGCCAGAG 3300
3313 GAGTCTGCTATGCTGCTGACAGACGCTTATCCCGCTGCTGCGACAGCCCAAGTCTATG 3372
3301 GGGUCCUCCUACUGGCGCCUGGACAGAGCAUCGCGCCUUCGCGAGGCGUUCUAG 3360
3373 TTACAGACATCTGCTGAGAGAGAGTGGGAGGAGTGTCTGCTGCTGCTGCTGCTGCTG 3422
3361 UUCAGAGACUCCUCCGAGAGAGGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 3420
3433 CAGGCGACCTATGTTTGGGGAGTGTGCTTATCCCGCTGCTGCGACAGCCCAAGTCTATG 3492
3421 CAGGCGACCTATGTTTGGGGAGTGTGCTTATCCCGCTGCTGCGACAGCCCAAGTCTATG 3480
3493 AGCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3552
3481 AGCAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3540
3553 AGCTCAAGGCGAGAGAGGCTATCAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3612
3541 AGCTCAAGGCGAGAGAGGCTATCAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3600
3613 CAGAGAGAGAGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3672
3601 CAGAGAGAGAGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3660
3673 CTACAGAGAGAGGCTTAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3732
3661 CTACAGAGAGAGGCTTAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3720
3733 CTGAGGTACAGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3792
3721 CUGAGGUCACAGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3780
3793 TTCTCAAGCTTCTCCCATCAAGCTTACTTACTTACTTACTTACTTACTTACTTACTTACTT 3852
3781 UUCUCCCAAGGUCUCCCAUACAGCCUUCUACUCCUCCUCCUCCUCCUCCUCCUCCUCC 3840
3853 ATTGATGAGAGCTC 3867
3841 AUAUAUCCGAGCC 3855

RESULT 4
US-10-126-052A-312
; Sequence 312, Application US/10126052A

GENERAL INFORMATION:
; APPLICANT: Aziz, Natasha
; APPLICANT: Murray, Richard
; APPLICANT: Ros Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Lung Cancer, Compositions and
; FILE REFERENCE: 018501-00153005
; CURRENT APPLICATION NUMBER: US/10/126,052A
; CURRENT FILING DATE: 2002-04-18
; PRIOR APPLICATION NUMBER: US 60/284,770
; PRIOR FILING DATE: 2001-04-18
; PRIOR APPLICATION NUMBER: US 60/290,492
; PRIOR FILING DATE: 2001-05-10
; PRIOR APPLICATION NUMBER: US 60/339,245
; PRIOR FILING DATE: 2001-11-09
; PRIOR APPLICATION NUMBER: US 60/350,666
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/334,370
; PRIOR FILING DATE: 2001-11-29
; PRIOR APPLICATION NUMBER: US 60/372,246
; PRIOR FILING DATE: 2002-04-12
; NUMBER OF SEQ ID NOS: 691
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 312
; LENGTH: 3855
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-126-052A-312

Query Match 73.3%; Score 3039; DB 8; Length 3855;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 3839; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

13 CTCGCGCCACCTTTGATGAGGAGGAGCTGGGACCTTTCAGACATCCCGAAGTTCAGG 72
1 CTCGCGCCACCTTTGATGAGGAGGAGCTGGGACCTTTCAGACATCCCGAAGTTCAGG 60
73 CACAGGTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 132
61 CACAGGTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 120
133 GCGCCACAGTGAAGACATCTGAGCTCAATTCAGATAGTGAATGACCTGCTCTT 192
121 GCGCCACAGTGAAGACATCTGAGCTCAATTCAGATAGTGAATGACCTGCTCTT 180
193 GTAAGCATGAGATGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 252
181 GTAAGCATGAGATGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 240
253 ATGCAATGATGGGAAAAAGACATCAACAATGAGAGAAAGCCCTGTCACCT 312
241 ATGCAATGATGGGAAAAAGACATCAACAATGAGAGAAAGCCCTGTCACCT 300
313 CCACTGAGTGAACAGAGATGACCTTCAATTCAGAACTTCAAGCAAGCAAGAAAGT 372
301 CCACTGAGTGAACAGAGATGACCTTCAATTCAGAACTTCAAGCAAGCAAGAAAGT 360
373 CCGCGCAGCCCTGCTGAGAGCGGAAAGTCTCAGAACTTCTGCTCAAGCTGATG 432
361 CCGCGCAGCCCTGCTGAGAGCGGAAAGTCTCAGAACTTCTGCTCAAGCTGATG 420
433 CAACCCATGCTCTCCCAAGGAGTGAAGTCAAAAAGTGGGAGCGGATGATCTT 492
421 CAACCCATGCTCTCCCAAGGAGTGAAGTCAAAAAGTGGGAGCGGATGATCTT 480
493 TCAGAGACACTTCAACATTAAGGCAAGGATTTTAACTTCAAGCTTCAATCTTGGC 552
481 TCAGAGACACTTCAACATTAAGGCAAGGATTTTAACTTCAAGCTTCAATCTTGGC 540
553 TGGGTCATTAATGACTCCCAAAAGTTTGAACAGAGAGCCAGGAGCAAGCTTCACTC 612
541 TGGGTCATTAATGACTCCCAAAAGTTTGAACAGAGAGCCAGGAGCAAGCTTCACTC 600

613 CAGATAGCTTCTACCTCAAGCTATGAAATTTGTCACCAATATTACGGCTCTCTCAAG 672
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Db 601 CAGATAGCTTCTACCTCAAGCTATGAAATTTGTCACCAATATTACGGCTCTCTCAAG 660
673 AGGCAAAATAGAGAACTCTGGCCAGGTGGAGCGGTAAACAAGAGATAGAAACA 732
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Db 661 AGGCAAAATAGAGAACTCTGGCCAGGTGGAGCGGTAAACAAGAGATAGAAACA 720
733 CAGGAACCTTACCACTGACGAGATGAGCTCATCTTGGCCACCAAGAGAGCTGGGCCA 792
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Db 721 CAGTAACCTTACCACTGACGAGATGAGCTCATCTTGGCCACCAAGAGAGCTGGGCCA 780
793 ATGCCCACTGCTGCAATTTGGAGAGATGCAAGTGTCCCAACCTGAGTCTTGCATGCCGCA 852
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Db 781 ATGCCCACTGCTGCAATTTGGAGAGATGCAAGTGTCCCAACCTGAGTCTTGCATGCCGCA 840
853 GCTGTTCACCTGCTGCAATTTGGAGAGATGCAAGTGTCCCAACCTGAGTCTTGCATGCCGCA 912
|||||
Db 841 GCTGTTCACCTGCTGCAATTTGGAGAGATGCAAGTGTCCCAACCTGAGTCTTGCATGCCGCA 900
913 ACAATGGCAACATCAGTGTGGCCATCACCGTGTCCGCCAGCGAGTATGGCAAGCAG 972
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Db 901 ACAATGGCAACATCAGTGTGGCCATCACCGTGTCCGCCAGCGAGTATGGCAAGCAG 960
973 ACTTCGGGTGTGGAACTGCTGAGCTCATCCGCTATGCTGGTACCAAGTGGCAAGTGGCA 1032
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Db 961 ACTTCGGGTGTGGAACTGCTGAGCTCATCCGCTATGCTGGTACCAAGTGGCAAGTGGCA 1020
1033 GCATCAGAGGGAGACCTGCTGCAAGTGTGAAATTCACCTGAGTGTGATGGAGTGGCA 1092
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Db 1021 GCATCAGAGGGAGACCTGCTGCAAGTGTGAAATTCACCTGAGTGTGATGGAGTGGCA 1080
1093 AGCCCAATCAGGCGGCTTGCATGTGTGCTCCCTGTGCTGCTGAGGCAAGTGGCGTGAAC 1152
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Db 1081 AGCCCAATCAGGCGGCTTGCATGTGTGCTCCCTGTGCTGCTGAGGCAAGTGGCGTGAAC 1140
1153 CTGACCTCTTGGAAATCCCACTGACCTTGTGAGGTGGCCATGGAAATCCCAAT 1212
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Db 1141 CTGACCTCTTGGAAATCCCACTGACCTTGTGAGGTGGCCATGGAAATCCCAAT 1200
1213 ACAGTGTGTTCGGGAACCTGAGCTTAAAGTGTAGCGCTGCTGCTGAGTGGCCAACTGC 1272
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Db 1201 ACAGTGTGTTCGGGAACCTGAGCTTAAAGTGTAGCGCTGCTGCTGAGTGGCCAACTGC 1260
1273 TGTGTGAGTGGGGGCTTGGAGTGTCCAGAGGTGCTTCAATGGCTGGTACATGGGCA 1332
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Db 1261 TGTGTGAGTGGGGGCTTGGAGTGTCCAGAGGTGCTTCAATGGCTGGTACATGGGCA 1320
1333 CAGAGATGGAGTCCGGGACTTGTGTGACGTCAGCGCTACCAATCCTGGAGAGTGG 1392
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Db 1321 CAGAGATGGAGTCCGGGACTTGTGTGACGTCAGCGCTACCAATCCTGGAGAGTGG 1380
1393 GCAGAGATGGGCTTGGAAACGCAAGAGTGGCTGCTGCTGGAAGAGCAGGCTTGC 1452
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Db 1381 GCAGAGATGGGCTTGGAAACGCAAGAGTGGCTGCTGCTGGAAGAGCAGGCTTGC 1440
1453 TTGAGATTAACATTTGCTGTATGCTATGTTTTCGAAGCAGATGTACATCATGTAGAC 1512
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Db 1441 TTGAGATTAACATTTGCTGTATGCTATGTTTTCGAAGCAGATGTACATCATGTAGAC 1500
1513 ACCACTGGGCTGCAAGATCTTCAATGAAGTACATGAGATTAACCGGCTCCCGTGGG 1572
|||||
Db 1501 ACCACTGGGCTGCAAGATCTTCAATGAAGTACATGAGATTAACCGGCTCCCGTGGG 1560
1573 GCTGCCGGGAGACTGATTTGGCTGTGCTCCCTCCATGTGTGGAGCAGTACCCCGTGT 1632
|||||
Db 1561 GCTGCCGGGAGACTGATTTGGCTGTGCTCCCTCCATGTGTGGAGCAGTACCCCGTGT 1620
1633 TTTCACGAGAGATCTGATCTGCTGTGCTCCCTTCTACTATCAGATGAGAGCTT 1692
|||||
Db 1621 TTTCACGAGAGATCTGATCTGCTGTGCTCCCTTCTACTATCAGATGAGAGCTT 1680
1693 GGAAGACCATGTCTGGCAGAGCAGAAAGGAGAGACCCCAAGAGAGATTCATTTGA 1752
|||||
Db 1681 GGAAGACCATGTCTGGCAGAGCAGAAAGGAGAGACCCCAAGAGAGATTCATTTGA 1740
1753 AAGTCTTGTCAAAAGCTGTGCTTGTGCTGTATGCTGATGCGCAAGACATGGCTGCC 1812
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Db 1741 AAGTCTTGTCAAAAGCTGTGCTTGTGCTGTATGCTGATGCGCAAGACATGGCTGCC 1800
1813 GAGTCAGAGTCAACATCTCTTGTGCAAGAGACAGAAATCAGAGGGGCTGGCTGGG 1872
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Db 1801 GAGTCAGAGTCAACATCTCTTGTGCAAGAGACAGAAATCAGAGGGGCTGGCTGGG 1860
1873 ACCTGGGGGCTTATTCAGTGTGCTTCAACCCCAAGGTGTGCTGATGATGAAGTACA 1932
|||||
Db 1861 ACCTGGGGGCTTATTCAGTGTGCTTCAACCCCAAGGTGTGCTGATGATGAAGTACA 1920
1933 GCGTGAAGTCTGCTGAGAGAGAAAGCGCTGCTGTGTGTGATGACAGTACGTTGGCAATG 1992
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Db 1921 GCGTGAAGTCTGCTGAGAGAGAAAGCGCTGCTGTGTGTGATGACAGTACGTTGGCAATG 1980
1993 GAGACTGGCCCTGCAATGAGAGAACTGAAAGAAATCGCTTCAATGCTGAAAGAGCTCA 2052
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Db 1981 GAGACTGGCCCTGCAATGAGAGAACTGAAAGAAATCGCTTCAATGCTGAAAGAGCTCA 2040
2053 ACAACAAATTCAGTACGCTGTGTTGGCTGCGCTGCAAGATGTACCTCGGTTCTGGC 2112
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Db 2041 ACAACAAATTCAGTACGCTGTGTTGGCTGCGCTGCAAGATGTACCTCGGTTCTGGC 2100
2113 CCTTGTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2172
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Db 2101 CCTTGTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2160
2173 TGGAGAGAGGGGATGAGCTAGTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2232
|||||
Db 2161 TGGAGAGAGGGGATGAGCTAGTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2220
2233 CCTTGAAGGAGGCTGTGAGAGTGTGATGTGCTGAGAGCAAGACATTCATGATCCCA 2292
|||||
Db 2221 CCTTGAAGGAGGCTGTGAGAGTGTGATGTGCTGAGAGCAAGACATTCATGATCCCA 2280
2293 AGCTTACACCTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2352
|||||
Db 2281 AGCTTACACCTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2340
2353 AGCTTGTGACCTCAGCAAAAGCCCTGAGAGATGATGATGATGATGATGATGATGATGATGAT 2412
|||||
Db 2341 AGCTTGTGACCTCAGCAAAAGCCCTGAGAGATGATGATGATGATGATGATGATGATGATGAT 2400
2413 GGCTCAATCTGGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2472
|||||
Db 2401 GGCTCAATCTGGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2460
2473 AACTTCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2532
|||||
Db 2461 AACTTCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2520
2533 GCCCAGGACCAAGCGCGGCTTGTGCAAGGATCCTGAGAGAGTGTGATGATGATGATGATGAT 2592
|||||
Db 2521 GCCCAGGACCAAGCGCGGCTTGTGCAAGGATCCTGAGAGAGTGTGATGATGATGATGATGAT 2580
2593 CACCCACCAAGAGAGTGGCTGAGAGAGTGTGATGATGATGATGATGATGATGATGATGATGAT 2652
|||||
Db 2581 CACCCACCAAGAGAGTGGCTGAGAGAGTGTGATGATGATGATGATGATGATGATGATGATGAT 2640
2653 ACAAGAGTGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2712
|||||
Db 2641 ACAAGAGTGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2700
2713 CACCCCAACCAAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2772
|||||
Db 2701 CACCCCAACCAAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2760
2773 GACAGAGCTGAGAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2832
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Db 2761 GACAGAGCTGGAGGCTGTGTCAGACCCCTCAGAGTACAGCAAGTGAAGTTCCACCAACA 2820
 QY 2833 GCGCCACATTTCTGGAGAGTGTAGAGAGTTCCTCCCTGGGGGTGTCTGTGGCTTC 2892
 Db 2821 GCGCCACATTTCTGGAGAGTGTAGAGAGTTCCTCCCTGGGGGTGTCTGTGGCTTC 2880
 QY 2893 TGGTTCCAGCTCCCATTTGAAAGCCCAAGGTCTTACTCCATCAGCTCCCTCCGGGATC 2952
 Db 2881 TGGTTCCAGCTCCCATTTGAAAGCCCAAGGTCTTACTCCATCAGCTCCCTCCGGGATC 2940
 QY 2953 ACAAGCCCAAGAGATCAGCTGATGTGGCCGTGTCACCTACACACACCCAGATGGCC 3012
 Db 2941 ACAAGCCCAAGAGATCAGCTGATGTGGCCGTGTCACCTACACACACCCAGATGGCC 3000
 QY 3013 AGGGTCCCTGACACCGAGTGTCTGAGACATGGCTCAACAGCTTGAAGCCCAAGACC 3072
 Db 3001 AGGGTCCCTGACACCGAGTGTCTGAGACATGGCTCAACAGCTTGAAGCCCAAGACC 3060
 QY 3073 CAGTGCCTGCTTTGGCGGAATGCGAGCGCTTCCACCTCCCGAGATGCCCTCCATC 3132
 Db 3061 CAGTGCCTGCTTTGGCGGAATGCGAGCGCTTCCACCTCCCGAGATGCCCTCCATC 3120
 QY 3133 CTTCATCTCATCGGGCTGCGACAGGATCGTCCCTTCCGCACTTTCTGCGACAAAC 3192
 Db 3121 CTTCATCTCATCGGGCTGCGACAGGATCGTCCCTTCCGCACTTTCTGCGACAAAC 3180
 QY 3193 GGTCCATGATCTCCACAGCAGAGAGAGTGGGGAGCCCGCATGACCTTGGTGTGGGT 3252
 Db 3181 GGTCCATGATCTCCACAGCAGAGAGAGTGGGGAGCCCGCATGACCTTGGTGTGGGT 3240
 QY 3253 GCGCGCCCGAGATGAGAGACACATCTACAGAGAGAGATGCTGAGATGGCCCAAGAG 3312
 Db 3241 GCGCGCCCGAGATGAGAGACACATCTACAGAGAGAGATGCTGAGATGGCCCAAGAG 3300
 QY 3313 GGGTGTGATGCGGTGACACAGACCTATTTCCCGCTGCTGGCAAGCCCAAGGTATG 3372
 Db 3301 GGGTGTGATGCGGTGACACAGACCTATTTCCCGCTGCTGGCAAGCCCAAGGTATG 3360
 QY 3373 TTGAGGATCTTCGCGGACAGCTGCTGCGAGAGAGTGTCTCGTGTGTCACCAAGAG 3432
 Db 3361 TTGAGGATCTTCGCGGACAGCTGCTGCGAGAGAGTGTCTCGTGTGTCACCAAGAG 3420
 QY 3433 CAGGACACCTCTATGTTTGGGGGATGTGGCATGCGCGGAGAGCTGGCCACACCTGA 3492
 Db 3421 CAGGACACCTCTATGTTTGGGGGATGTGGCATGCGCGGAGAGCTGGCCACACCTGA 3480
 QY 3493 AGCAGCTGTGCTGCCAGCTGAATTTGATGAGAGAGCTGCGAGACTATTTCTTTC 3552
 Db 3481 AGCAGCTGTGCTGCCAGCTGAATTTGATGAGAGAGCTGCGAGACTATTTCTTTC 3540
 QY 3553 AGCTCAAGAGCCAGAGAGCTATCAGAGATGCTTGGTGTCTGATTTCTTACAGAG 3612
 Db 3541 AGCTCAAGAGCCAGAGAGCTATCAGAGATGCTTGGTGTCTGATTTCTTACAGAG 3600
 QY 3613 CGAAGAGAGCAGAGAGCTGCGAGCCAGCCAGCTGAGATGTGAGGCTTGAAGG 3672
 Db 3601 CGAAGAGAGCAGAGAGCTGCGAGCCAGCCAGCTGAGATGTGAGGCTTGAAGG 3660
 QY 3673 CTACAGAGAGGTTAAAGTGTCCGCGACAGAACTTAAAGATGAGAGCAGCTGTGAT 3732
 Db 3661 CTACAGAGAGGTTAAAGTGTCCGCGACAGAACTTAAAGATGAGAGCAGCTGTGAT 3720
 QY 3733 CTGAGGTACAGAGGCTGGGGAGATGAGAGAAAGTATATCCCCAGCTCAAGTCTTAT 3792
 Db 3721 CTGAGGTACAGAGGCTGGGGAGATGAGAGAAAGTATATCCCCAGCTCAAGTCTTAT 3780
 QY 3793 TTCTCAAGCTTCTCCATCAAGCCCTTACTTGAAGCTTCAAGAGTACAGACCTG 3852
 Db 3781 TTCTCAAGCTTCTCCATCAAGCCCTTACTTGAAGCTTCAAGAGTACAGACCTG 3840
 QY 3853 ATTGATGGAGCTC 3867
 Db 3841 ATTGATGGAGCTC 3855

RESULT 5
 US-09-724-676-37685
 ; Sequence 37685, Application US/09724676
 ; GENERAL INFORMATION:
 ; APPLICANT: Compugen LTD
 ; TITLE OF INVENTION: Variants of alternative splicing
 ; FILE REFERENCE: 129181.4 Compugen
 ; CURRENT APPLICATION NUMBER: US/09/724,676
 ; NUMBER OF SEQ ID NOS: 97222
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 37685
 ; LENGTH: 3984
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-09-724-676-37685

Query Match 70.1%; Score 2906; DB 6; Length 3984;
 Best Local Similarity 99.7%; Pred. No. 0;
 Matches 3356; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 1 CTGCTTAAATCTCTGCGCCACCTTTGATGAGGGAGTGGGAGTTGTAGACAGTCCG 60
 Db 29 CTGCTTAAATCTCTGCGCCACCTTTGATGAGGGAGTGGGAGTGTAGACAGTCCG 88
 QY 61 AAGTTCTAAGGACAGGTCTTCTGCTGTTGACTGTCTTACCCGGGAGGACAGTGC 120
 Db 89 AAGTTCTAAGGACAGGTCTTCTGCTGTTGACTGTCTTACCCGGGAGGACAGTGC 148
 QY 121 AGCCAGTGTCAAGCCCAAGTGAAGATCTGAGCTCAATCCAGATAAGTACATAA 180
 Db 149 AGCCAGTGTCAAGCCCAAGTGAAGATCTGAGCTCAATCCAGATAAGTACATAA 208
 QY 181 GTGACCTCTTTTAAAGCCATAGAGATGCTGTCTTGAAGAAATTTCTGTTAAGCA 240
 Db 209 GTGACCTCTTTTAAAGCCATAGAGATGCTGTCTTGAAGAAATTTCTGTTAAGCA 268
 QY 241 AATTCACAGATATGATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 300
 Db 269 AATTCACAGATATGATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 328
 QY 301 CCTGTGACACCTCCAGTCCAGTGAACAGATGACCTTCAATCACAACCTCAGAAC 360
 Db 329 CCTGTGACACCTCCAGTCCAGTGAACAGATGACCTTCAATCACAACCTCAGAAC 388
 QY 361 AGCAGATGATGCTCCCGAGCCCTCTGTGAGAGCGGAGGAGGAGGAGGAGGAGG 420
 Db 389 AGCAGATGATGCTCCCGAGCCCTCTGTGAGAGCGGAGGAGGAGGAGGAGGAGG 448
 QY 421 TCAAGCTGATGACAGCCCATTTGCTCCCAAGGATGTGAGGATCAAAATCTGGGA 480
 Db 449 TCAAGCTGATGACAGCCCATTTGCTCCCAAGGATGTGAGGATCAAAATCTGGGA 508
 QY 481 GCGGATGATCTTCCAGAGACACTTCAACATTAAGGCCAAAGGATTTTAACTGAGGT 540
 Db 509 GCGGATGATCTTCCAGAGACACTTCAACATTAAGGCCAAAGGATTTTAACTGAGGT 568
 QY 541 CCAAAATCTTGGCTGGGGTCAATTAATGACTCCCAAAAGTTGACAGAGAGACCCAGGACA 600
 Db 569 CCAAAATCTTGGCTGGGGTCAATTAATGACTCCCAAAAGTTGACAGAGAGACCCAGGACA 628
 QY 601 AGCTTACCCCTCAGATGAGCTTACCTCAAGCTATGGAATTTGTCAACCAATATTAG 660
 Db 629 AGCTTACCCCTCAGATGAGCTTACCTCAAGCTATGGAATTTGTCAACCAATATTAG 688
 QY 661 GCTCCTTAAAGAGGCAAAATAGAGAACTGTGGCCAGGGTGAAGCGGTAAACAAAG 720
 Db 689 GCTCCTTAAAGAGGCAAAATAGAGAACTGTGGCCAGGGTGAAGCGGTAAACAAAG 748
 QY 721 AGATGAAGCAAGAGAACTTCACTGAGGAGGAGATGAGCTATCTTCCCAACCAAG 780

Db	749	AGATGAGAAACAGAGAACTTACCACGTACGAGGAGATGACTCATCTTCCACCAAGC	808
QY	781	AGGCTGGGCGCAATGCCACGCTGCATTTGGAGGATTCAGTGGTCCAACTTCAGAGTCT	840
Db	809	AGGCTGGGCGCAATGCCACGCTGCATTTGGAGGATTCAGTGGTCCAACTTCAGAGTCT	868
QY	841	TCGATGCCGACGCTGTTCCACTGCTGCGGGAATGTTTGAACACATCTGACACAGTGC	900
Db	869	TCGATGCCGACGCTGTTCCACTGCTGCGGGAATGTTTGAACACATCTGACACAGTGC	928
QY	901	GTTACTCCACCAACATGCGACATCATGAGTGGCCATCACCGGTTGCCCGAGCGAGTG	960
Db	929	GTTACTCCACCAACATGCGACATCATGAGTGGCCATCACCGGTTGCCCGAGCGAGTG	988
QY	961	ATGGCAAGCAGCACTTCCGGGTGTGAATGCTCAGCTCATCCGCTATGCTGGCTACAGA	1020
Db	989	ATGGCAAGCAGCACTTCCGGGTGTGAATGCTCAGCTCATCCGCTATGCTGGCTACAGA	1048
QY	1021	TGCCAATGGCAGCATCAGAGGGGACCTGGCAACGCTGGAATTTCACTAGCTGTGATCG	1080
Db	1049	TGCCAATGGCAGCATCAGAGGGGACCTGGCAACGCTGGAATTTCACTAGCTGTGATCG	1108
QY	1081	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTGATGTGGTCCCGTGTCTGCAGAGCCA	1140
Db	1109	ACCTGGGCTGGAAGCCCAAGTACGGCCGCTGATGTGGTCCCGTGTCTGCAGAGCCA	1168
QY	1141	ATGGCGGTGACCTTGAGCTCTTGCAGATTCACCTGACCTTGTCTGAGTGGCCATGG	1200
Db	1169	ATGGCGGTGACCTTGAGCTCTTGCAGATTCACCTGACCTTGTCTGAGTGGCCATGG	1228
QY	1201	AACATCCCAATACAGTGTGTTGGGAACTGAGCTAAAGTGTACGGCCGCTGGTAG	1260
Db	1229	AACATCCCAATACAGTGTGTTGGGAACTGAGCTAAAGTGTACGGCCGCTGGTAG	1288
QY	1261	TGGCCAACTGCTGCTTGAAGTGGGCGGCTGAGATTCCAGAGTGGCCCTTCAATGGCT	1320
Db	1289	TGGCCAACTGCTGCTTGAAGTGGGCGGCTGAGATTCCAGAGTGGCCCTTCAATGGCT	1348
QY	1321	GATACATGGGCAAGAGATCGAGTCCGGGACTTCTGTGACCTCCAGGCTTCAACATCC	1380
Db	1349	GATACATGGGCAAGAGATCGAGTCCGGGACTTCTGTGACCTCCAGGCTTCAACATCC	1408
QY	1381	TGGAGGAAGTGGGCAAGAGATGGGCTTGGAAACGACAACTGGCTCGCTTGGAGAG	1440
Db	1409	TGGAGGAAGTGGGCAAGAGATGGGCTTGGAAACGACAACTGGCTCGCTTGGAGAG	1468
QY	1441	ACCAGGCTGTCTTGAATCAACATTTGCTGTATCATAGTTTTCAGAAAGAGATGTGA	1500
Db	1469	ACCAGGCTGTCTTGAATCAACATTTGCTGTATCATAGTTTTCAGAAAGAGATGTGA	1528
QY	1501	CCATCATGGACACACACGCTGCTGAGAACTCTTCATCAATGATGAGATGAAATACC	1560
Db	1529	CCATCATGGACACACACGCTGCTGAGAACTCTTCATCAATGATGAGATGAAATACC	1588
QY	1561	GATCCCGTGGGGGCTGGCCCGGACAGTGGATTTGGCTGGCTCCCTTCCATGCTGGAGCA	1620
Db	1589	GATCCCGTGGGGGCTGGCCCGGACAGTGGATTTGGCTGGCTCCCTTCCATGCTGGAGCA	1648
QY	1621	TCACCCCGTGTTCACCAAGAGATGCTGAACATGCTCTGCTGCTCCCTTCTACTACTATC	1680
Db	1649	TCACCCCGTGTTCACCAAGAGATGCTGAACATGCTCTGCTGCTCCCTTCTACTACTATC	1708
QY	1681	AGGTAGAGGCTGGAAAAACCATGCTGGGACGAGAGAGAAAGGAGACCAAGAAAGAG	1740
Db	1709	AGGTAGAGGCTGGAAAAACCATGCTGGGACGAGAGAGAAAGGAGACCAAGAAAGAG	1768
QY	1741	AGATTTCATTTGAAGTCTTGGTCAAAAGCTGTGCTTTGGCTGTATCTGTGGGACAGA	1800
Db	1769	AGATTTCATTTGAAGTCTTGGTCAAAAGCTGTGCTTTGGCTGTATCTGTGGGACAGA	1828
QY	1801	CAATGGGCTCCGAGTCAAGATCAACATCTCTTTCGACAGAGACAGAAATTCAGAGG	1860
Db	1829	CAATGGGCTCCGAGTCAAGATCAACATCTCTTTCGACAGAGACAGAAATTCAGAGG	1888
QY	1861	CGCTGGCCGGGACCTGGGGGCTTATTACAGCTGTGCTTCAACCCCAAGTGTGTGCA	1920
Db	1889	CGCTGGCCGGGACCTGGGGGCTTATTACAGCTGTGCTTCAACCCCAAGTGTGTGCA	1948
QY	1921	TGATTAAGTACAGGCTGAGCTGCTGTGAGAGAGAGAGGCTCTGTGGTGTGACAGTA	1980
Db	1949	TGATTAAGTACAGGCTGAGCTGCTGTGAGAGAGAGAGGCTCTGTGGTGTGACAGTA	2008
QY	1981	CGTTGGCAATGAGAGACTGCTTGGCAATGAGAGAAATGAGAAATGCTCTTCAATGC	2040
Db	2009	CGTTGGCAATGAGAGACTGCTTGGCAATGAGAGAAATGAGAAATGCTCTTCAATGC	2068
QY	2041	TGAAGAGCTCAACAAATTCAGAGTACGCTGTTGGCTGGCTGGCTCCAGATGATAC	2100
Db	2069	TGAAGAGCTCAACAAATTCAGAGTACGCTGTTGGCTGGCTGGCTCCAGATGATAC	2128
QY	2101	CTGGGTTCTGGGCTTGTGCTCATGACATTTGATCAGAGCTGTCCACCTGGGGGCTCTC	2160
Db	2129	CTGGGTTCTGGGCTTGTGCTCATGACATTTGATCAGAGCTGTCCACCTGGGGGCTCTC	2188
QY	2161	AGCTACCCCGATGGGAGAAAGGGATGAGCTCAGTGGGCAAGAGAGGCTTCGCAAGT	2220
Db	2189	AGCTACCCCGATGGGAGAAAGGGATGAGCTCAGTGGGCAAGAGAGGCTTCGCAAGT	2248
QY	2221	GGGCCGTGCAAACTTCAAGGCAAGCTGTGAGAGCTTGTGATGTCGCGAGCAACAGACA	2280
Db	2249	GGGCCGTGCAAACTTCAAGGCAAGCTGTGAGAGCTTGTGATGTCGCGAGCAACAGACA	2308
QY	2281	TTGAGATCCCAAGCTTACACCTTCAATGTGACCTGGGACCGGCAACCTACAGGCTCG	2340
Db	2309	TTGAGATCCCAAGCTTACACCTTCAATGTGACCTGGGACCGGCAACCTACAGGCTCG	2368
QY	2341	TGCAGACTCAAGACCTTTGGACCTTACAGCAAGCCCTACAGACATGATGCCAAAGG	2400
Db	2369	TGCAGACTCAAGACCTTTGGACCTTACAGCAAGCCCTACAGACATGATGCCAAAGG	2428
QY	2401	TGTTACACATGAGGCTCAAACTCTCGGCAAGATCTAGCAAAATCCGACATCAGGCTGCA	2460
Db	2429	TGTTACACATGAGGCTCAAACTCTCGGCAAGATCTAGCAAAATCCGACATCAGGCTGCA	2488
QY	2461	CCATCTCTGTGGAACTCTCTGTGAGAGTGGCCAAAGGCTGAACTACCTGCGGGGAGC	2520
Db	2489	CCATCTCTGTGGAACTCTCTGTGAGAGTGGCCAAAGGCTGAACTACCTGCGGGGAGC	2548
QY	2521	ACCTTGGGGTTCGCCAGGCAACGACCGGCGCTGTCCAAAGGCAATCTGGAGGCTGG	2580
Db	2549	ACCTTGGGGTTCGCCAGGCAACGACCGGCGCTGTCCAAAGGCAATCTGGAGGCTGG	2608
QY	2581	TGATGGGCCCCACACCCCAACAGACAGTGGCTTGGAGAGCTGGATGAGATGGGAGCT	2640
Db	2609	TGATGGGCCCCACACCCCAACAGACAGTGGCTTGGAGAGCTGGATGAGATGGGAGCT	2668
QY	2641	ACTGGGTCAATGACAGAGGCTGCGCCCTGCTCACTACAGCAGGCGCTACACTATCC	2700
Db	2669	ACTGGGTCAATGACAGAGGCTGCGCCCTGCTCACTACAGCAGGCGCTACACTATCC	2728
QY	2701	CGGACATCACACACCCCAACCCAGCTGCTGTCCAAAAGTGGGCCCAAGTGGGACAG	2760
Db	2729	CGGACATCACACACCCCAACCCAGCTGCTGTCCAAAAGTGGGCCCAAGTGGGACAG	2788
QY	2761	AAGAGCTTGAAGAGACAGAGGCTGGAGGCTGTGCAGAGCCTTCAGAGTACAGAGTGA	2820
Db	2789	AAGAGCTTGAAGAGACAGAGGCTGGAGGCTGTGCAGAGCCTTCAGAGTACAGAGTGA	2848
QY	2821	AGTTACCAACAGCCCAACATTCCTGTGAGAGTCTTGAAGAGTTCCTGCTGCGGTGT	2880
Db	2849	AGTTACCAACAGCCCAACATTCCTGTGAGAGTCTTGAAGAGTTCCTGCTGCGGTGT	2908
QY	2881	CTGCTGGCTTCTGCTTCCAGAGTCCCATTTCTAAGGCCAGGTTCTACTCCATCAGACT	2940
Db	2909	CTGCTGGCTTCTGCTTCCAGAGTCCCATTTCTAAGGCCAGGTTCTACTCCATCAGACT	2968

QY	2941	CTCTCCGGGATCACAGCCACGAGATCACTGATGTGGCGCTGGTCACTACACACA	3000
Db	2969	CTCTCCGGGATCACAGCCACGAGATCACTGATGTGGCGCTGGTCACTACACACA	3028
QY	3001	CCGAGATGGCCAGGGTCCCTGTGCACACAGTGTCTGCAGCATGTCTCAACAGCTGA	3060
Db	3029	CCCGAGATGGCCAGGGTCCCTGTGCACACAGGGGTCTGCGAGCAATGTCTCAACAGCTGA	3088
QY	3061	AGCCCCAAGACCCAGTGGCCCTGTTGTGCGGAAATGCCAGGCGCTTCCACCTCCCCGAGG	3120
Db	3089	AGCCCCAAGACCCAGTGGCCCTGTTGTGCGGAAATGCCAGGCGCTTCCACCTCCCCGAGG	3148
QY	3121	ATCCCTCCCATCTTCATCTCTCATGCGGCGTGGACAGCGATCTGTGCCCTTCCGAGTT	3180
Db	3149	ATCCCTCCCATCTTCATCTCTCATGCGGCGTGGACAGCGATCTGCCGCTTCCGAGTT	3208
QY	3181	TCATGGCAGCAGCGCTTCATGATCTCCACACAAAGGAAATGGGGGAGGCGCATGACTT	3240
Db	3209	TCATGGCAGCAGCGCTTCATGATCTCCACACAAAGGAAATGGGGGAGGCGCATGACTT	3268
QY	3241	TGTGTTTGGGTCCCGCGGCCGAGATGAGGACCACATCTACACAGAGAGATGTGGAGA	3300
Db	3269	TGTGTTTGGGTCCCGCGGCCGAGATGAGGACCACATCTACACAGGAGGAGTGTGGAGA	3328
QY	3301	TGGCCCAAGAGGGGTGTCTGATGTGGGTGCACACAGCTATTTCGGCTGTGGCAAGC	3360
Db	3329	TGGCCCAAGAGGGGTGTCTGATGTGGGTGCACACAGCTATTTCGGCTGTGGCAAGC	3388
QY	3361	CCAAG 3365	
Db	3389	CCAAG 3393	

RESULT 6
US-09-724-676A-37685
; Sequence 37685, Application US/09724676A

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? GENERAL INFORMATION:
? APPLICANT: Compugen LTD
? TITLE OF INVENTION: Variants of alternative splicing
? FILE REFERENCE: 129181.4 Compugen
? CURRENT APPLICATION NUMBER: US/09/724,676A
? NUMBER OF SEQ ID NOS: 2000-11-28
? SOFTWARE: PatentIn version 3.2
? SEQ ID NO 37685
? LENGTH: 3984
? TYPE: DNA
? ORGANISM: Homo sapiens
US-09-724-676A-37685

Query Match          70.1%   Score 2906;   DB 6;   Length 3984;
Best Local Similarity 99.7%   Pred. No. 0;
Matches 3356; Conservative 0; Mismatches 9; Indels 0; Gaps 0

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OY	301	CCGTGGCCACCTCCATCCAGTACACAGAGATGACCTTCACTATACACAACTCAGCAAGC	360
OY	329	CTTGTGCACCTCCACTCCAGTACACAGATGACCTTCACTATACACAACTCAGCAAGC	388
OY	361	AGCAGATGAGTCCCGCAGCCCTCGTGGAGACGGGAAAGAAAGCTCTCAGAACTCTCTGG	420
Db	389	AGCAGATGAGTCCCGCAGCCCTCGTGGAGACGGGAAAGAAAGCTCTCAGAACTCTCTGG	448
OY	421	TCAGCTGAGATGCAACCCCATTTGTCTCTCCCGACATGTAGAGATCAAAAACCTGGGGGCA	480
Db	449	TCAAGCTGAGATGCAACCCCATTTGTCTCTCCCGACATGTAGAGATCAAAAACCTGGGGGCA	508
OY	481	GGCGGATGACTTTTCCAAAGACACACTTCACACTAAGGCCCAAGGGGATTTTAATCTGCAGT	540
Db	509	GGCGGATGACTTTTCCAAAGACACACTTCACACTAAGGCCCAAGGGGATTTTAATCTGCAGT	568
OY	541	CCAAATCTTGCTGGGGTCCATTATGACTCTCCAAAAGTTTACACAGAGACCCAGGGACA	600
Db	569	CCAAATCTTGCTGGGGTCCATTATGACTCTCCAAAAGTTTACACAGAGACCCAGGGACA	628
OY	601	AGCCTACCCCTCCAGATGAGCTCTTACCTCAAGCTATGAGTAATTTGTCAACCAATATTACG	660
Db	629	AGCCTACCCCTCCAGATGAGCTCTTACCTCAAGCTATGAGTAATTTGTCAACCAATATTACG	688
OY	661	GCTCCTTCAAAAGGCAAAATAGAGAACTGTGCGAGGGTGGAAACGGTAAACAAAGG	720
Db	689	GCTCCTTCAAAAGGCAAAATAGAGAACTGTGCGAGGGTGGAAACGGTAAACAAAGG	748
OY	721	AGATAGAAACACAGAGACCTTACCACCTACGGGGAGATGAGCTCATCTTGCGCCACAGC	780
Db	749	AGATAGAAACACAGAGACCTTACCACCTACGGGGAGATGAGCTCATCTTGCGCCACAGC	808
OY	781	AGGCGTGGCGCAAGTCCCGCAGCTGATTTGGAGAGATCAGTGGTCCAACTGCAGGCTT	840
Db	809	AGGCGTGGCGCAAGTCCCGCAGCTGATTTGGAGAGATCAGTGGTCCAACTGCAGGCTT	868
OY	841	TGATGCCCCGAGCTGTTCCACTGCCCCGGGAAATGTTTGAACACTCTGCAACAGCTGC	900
Db	869	TGATGCCCCGAGCTGTTCCACTGCCCCGGGAAATGTTTGAACACTCTGCAACAGCTGC	928
OY	901	GTTACTCACCACAAATGGGCAACATCAGGTCGGCCATCCGCTGTTTCCCGAGGGAGTG	960
Db	929	GTTACTCACCACAAATGGGCAACATCAGGTCGGCCATCCGCTGTTTCCCGAGGGAGTG	988
OY	961	ATGGCAAGCAGACTTCCGGGTGGAAATGCTACGCTACCCGATAGCTGGTACAGCA	1020
Db	989	ATGGCAAGCAGACTTCCGGGTGGAAATGCTACGCTACCCGATAGCTGGTACAGCA	1048
OY	1021	TGCCAGATGAGAGATAGAGGGGAGCCGTGCCAAGCTGGAATTCATCAGTGTGCAATCG	1080
Db	1049	TGCCAGATGAGAGATAGAGGGGAGCCGTGCCAAGCTGGAATTCATCAGTGTGCAATCG	1108
OY	1081	ACCTTGGCTGGAAAGCCCAAGTACGGCCGCTTGATGTGGTCCCTGGTCTCGAAGGCA	1140
Db	1109	ACCTTGGCTGGAAAGCCCAAGTACGGCCGCTTGATGTGGTCCCTGGTCTCGAAGGCA	1168
OY	1141	ATGGCCGTGACCTTGAGCTCTTGGAAATCCCACTACTTGTGCTTAGAGTGGCCATGG	1200
Db	1169	ATGGCCGTGACCTTGAGCTCTTGGAAATCCCACTACTTGTGCTTAGAGTGGCCATGG	1228
OY	1201	AACATCCCAATAGAGTGGTTCGGGAACTGAGATTAAGTGAAGTGAACCCCTGCCTGAG	1260
Db	1229	AACATCCCAATAGAGTGGTTCGGGAACTGAGATTAAGTGAAGTGAACCCCTGCCTGAG	1288
OY	1261	TGGCCACATCTGCTTGAGGTGGGGCGCTGAGTTCACAGGGTGGCCCTTCAATGACT	1320
Db	1289	TGGCCACATCTGCTTGAGGTGGGGCGCTGAGTTCACAGGGTGGCCCTTCAATGACT	1348
OY	1321	GGTAACTGGGAACAGATGGGATCCGGGACTTCTGTACGTCACAGGCTTCAACATTC	1380
Db	1349	GGTAACTGGGAACAGATGGGATCCGGGACTTCTGTACGTCACAGGCTTCAACATTC	1408

NUMBER OF SEQ. ID NOS: 97222
SOFTWARE: Patentin version 3.2
SEQ ID NO: 37684
LENGTH: 3985
TYPE: DNA
ORGANISM: Homo sapiens
US-09-724-676-37684

Query Match 70.1%; Score 2906; DB 6; Length 3985;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 3356; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 1 CCGCTTTAAATCTCGGCCACCTTTGATGAGGGAGTGGGCACTTTAGACAGTCCG 60
DB CCGCTTTAAATCTCTCGGCCACCTTTGATGAGGGAGTGGGCACTTTAGACAGTCCG 88
QY 61 AAGTTCTCAAGGACAGAGTCTCTCTGTTGACTGTCTTACCCGGGGAAGGCAATGC 120
DB AAGTTCTCAAGGACAGAGTCTCTCTGTTGACTGTCTTACCCGGGGAAGGCAATGC 148
QY 121 AGCCAGCTGCAAGCCCGACAGTGAAGAACATCTGAGCTCAATCCAGATAGTGCATTA 180
DB AGCCAGCTGCAAGCCCGACAGTGAAGAACATCTGAGCTCAATCCAGATAGTGCATTA 208
QY 149 ACCCAGCTGCAAGCCCGACAGTGAAGAACATCTGAGCTCAATCCAGATAGTGCATTA 208
DB AGCAGCTGCTTTGTAAGCCATGAGATGAGCTGCTTGAATTTCTGTTCAAGACCA 240
QY 181 GAGACCTGCTTTGTAAGCCATGAGATGAGCTGCTTGAATTTCTGTTCAAGACCA 240
DB GTGACCTGCTTTGTAAGCCATGAGATGAGCTGCTTGAATTTCTGTTCAAGACCA 268
QY 209 GTGACCTGCTTTGTAAGCCATGAGATGAGCTGCTTGAATTTCTGTTCAAGACCA 268
DB GTGACCTGCTTTGTAAGCCATGAGATGAGCTGCTTGAATTTCTGTTCAAGACCA 300
QY 241 AATTCACCAAGTATGCAATGAATGGGGAAGAACATCAACACATGTGAGAAAGCC 300
DB AATTCACCAAGTATGCAATGAATGGGGAAGAACATCAACACATGTGAGAAAGCC 328
QY 301 CCTGTGCCACCTCCAGTCCAGTGAACAGATGAGCTTCCAGTATCAACCTCAGCAAGC 360
DB CCTGTGCCACCTCCAGTCCAGTGAACAGATGAGCTTCCAGTATCAACCTCAGCAAGC 388
QY 329 CCGTCCACCTCCAGTCCAGTGAACAGATGAGCTTCCAGTATCAACCTCAGCAAGC 388
DB CCGTCCACCTCCAGTCCAGTGAACAGATGAGCTTCCAGTATCAACCTCAGTCTGG 448
QY 361 AGCAGATGATGCCCGCAGCCCTCTGTGAGAGACGGGAAGATCTCCAGATCTCTGG 420
DB AGCAGATGATGCCCGCAGCCCTCTGTGAGAGACGGGAAGATCTCCAGATCTCTGG 448
QY 421 TCAGAGTGAATGACACCCATTTCTCTCCCGACAGGATGTGAGATCAAAATCTGGGCA 480
DB TCAGAGTGAATGACACCCATTTCTCTCCCGACAGGATGTGAGATCAAAATCTGGGCA 508
QY 449 TCAGAGTGAATGACACCCATTTCTCTCCCGACAGGATGTGAGATCAAAATCTGGGCA 508
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QY 481 GCGGGATGATTTCCAAAGACACCTTCCAGATGAAGGCAAGGATTTTAACTGAGGT 540
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QY 509 GCGGGATGATTTCCAAAGACACCTTCCAGATGAAGGCAAGGATTTTAACTGAGGT 568
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QY 541 CCAATCTTGTCTGGGGTCCATTATGATGCCAAAGTTTGACCAAGGACCCAGGACA 600
DB CCAATCTTGTCTGGGGTCCATTATGATGCCAAAGTTTGACCAAGGACCCAGGACA 628
QY 601 AGCCTACCCCTCCAGATGAGCTTCTTACCTTCACTTCCAGATTTTGAACCAATATTAG 660
DB AGCCTACCCCTCCAGATGAGCTTCTTACCTTCACTTCCAGATTTTGAACCAATATTAG 688
QY 629 AGCCTACCCCTCCAGATGAGCTTCTTACCTTCACTTCCAGATTTTGAACCAATATTAG 688
DB GCTTCCTTCAAGAGGCAAAATATGAGGACATCTGGCCAGGAGTGAAGGCGGTAAAGG 720
QY 661 GCTTCCTTCAAGAGGCAAAATATGAGGACATCTGGCCAGGAGTGAAGGCGGTAAAGG 720
DB GCTTCCTTCAAGAGGCAAAATATGAGGACATCTGGCCAGGAGTGAAGGCGGTAAAGG 748
QY 689 GCTTCCTTCAAGAGGCAAAATATGAGGACATCTGGCCAGGAGTGAAGGCGGTAAAGG 748
DB AGATAGAAACACAGAACTTACCACTGACGAGGATGAGTCACTTCTGCCACCAAGC 808
QY 721 AGATAGAAACACAGAACTTACCACTGACGAGGATGAGTCACTTCTGCCACCAAGC 808
DB AGATAGAAACACAGAACTTACCACTGACGAGGATGAGTCACTTCTGCCACCAAGC 840
QY 781 AGGCTTGGCGCAATGGCCCAAGCTGATTTGGAGAGATTCAGTGTTCACCTGAGGTCT 840
DB AGGCTTGGCGCAATGGCCCAAGCTGATTTGGAGAGATTCAGTGTTCACCACTGAGGTCT 868
QY 841 TCGATGCGCCGAGCTGTTTCACTGAGCGGGAAGATGTTGAACATCTGAGACAGCTGC 900
DB TCGATGCGCCGAGCTGTTTCACTGAGCGGGAAGATGTTGAACATCTGAGACAGCTGC 928
QY 869 TCGATGCGCCGAGCTGTTTCACTGAGCGGGAAGATGTTGAACATCTGAGACAGCTGC 928
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DB GTTACTCCACCAATGAGCAATGAGTCAAGTTCAGGCTACCTGTCTCCCGAGCGAGTG 988
QY 929 GTTACTCCACCAATGAGCAATGAGTCAAGTTCAGGCTACCTGTCTCCCGAGCGAGTG 988
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DB ATGGCAAGACGACATTCGCGGCTGTGAATGCTAGCTCAATCCGCTATGCTGCTACCA 1048
QY 989 ATGGCAAGACGACATTCGCGGCTGTGAATGCTAGCTCAATCCGCTATGCTGCTACCA 1048
DB ATGGCAAGACGACATTCGCGGCTGTGAATGCTAGCTCAATCCGCTATGCTGCTACCA 1080
QY 1021 TGGCAGATGACATGACAGGAGGACCTTGCACAGCTGATGATCTACCTAGCTGTGATCG 1080
DB TGGCAGATGACATGACAGGAGGACCTTGCACAGCTGATGATCTACCTAGCTGTGATCG 1108
QY 1049 TGGCAGATGACATGACAGGAGGACCTTGCACAGCTGATGATCTACCTAGCTGTGATCG 1108
DB ACCTGGCTGGAAGCCCAATACGCGCTTCCATGATGATGCTCCCTGCTCTCAGGCA 1168
QY 1081 ACCTGGCTGGAAGCCCAATACGCGCTTCCATGATGATGCTCCCTGCTCTCAGGCA 1140
DB ACCTGGCTGGAAGCCCAATACGCGCTTCCATGATGATGCTCCCTGCTCTCAGGCA 1168
QY 1109 ACCTGGCTGGAAGCCCAATACGCGCTTCCATGATGATGCTCCCTGCTCTCAGGCA 1168
DB ATGGCCGTGACCTGAGACCTTTCGAAATCCACCTGACCTTGTGATGAGTGGCCATGG 1228
QY 1141 ATGGCCGTGACCTGAGACCTTTCGAAATCCACCTGACCTTGTGATGAGTGGCCATGG 1228
DB ATGGCCGTGACCTGAGACCTTTCGAAATCCACCTGACCTTGTGATGAGTGGCCATGG 1260
QY 1201 AACATCCCAATACGAGTGTTCGAGACCTGAGCTAAAGTGTACGCTTCCCTGCAAG 1260
DB AACATCCCAATACGAGTGTTCGAGACCTGAGCTAAAGTGTACGCTTCCCTGCAAG 1288
QY 1229 AACATCCCAATACGAGTGTTCGAGACCTGAGCTAAAGTGTACGCTTCCCTGCAAG 1288
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QY 1261 TGGCCCAATGCTGCTTGAAGTGGGCGCTGAGGCTTCCAGAGGCTGCTTCAATGGCT 1320
DB TGGCCCAATGCTGCTTGAAGTGGGCGCTGAGGCTTCCAGAGGCTGCTTCAATGGCT 1348
QY 1289 TGGCCCAATGCTGCTTGAAGTGGGCGCTGAGGCTTCCAGAGGCTGCTTCAATGGCT 1348
DB GGTACATGGGCGACAGATGAGTGGGCGCTGAGGCTTCCAGAGGCTGCTTCAATGGCT 1380
QY 1321 GGTACATGGGCGACAGATGAGTGGGCGCTGAGGCTTCCAGAGGCTGCTTCAATGGCT 1380
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QY 1349 GGTACATGGGCGACAGATGAGTGGGCGCTGAGGCTTCCAGAGGCTGCTTCAATGGCT 1408
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QY 1381 TGGAGGAAGTGGGCGAGGAGTGGGCGCTGAGGAGTGGGCGCTTCCAGAGGCTGCTTCAATGGCT 1440
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QY 1409 TGGAGGAAGTGGGCGAGGAGTGGGCGCTGAGGAGTGGGCGCTTCCAGAGGCTGCTTCAATGGCT 1468
DB ACCAGGCTGTGTGAGTCAACATTTGCTGTCTCAGTATGTTTCCAAACAGATGTGA 1500
QY 1441 ACCAGGCTGTGTGAGTCAACATTTGCTGTCTCAGTATGTTTCCAAACAGATGTGA 1500
DB ACCAGGCTGTGTGAGTCAACATTTGCTGTCTCAGTATGTTTCCAAACAGATGTGA 1528
QY 1469 ACCAGGCTGTGTGAGTCAACATTTGCTGTCTCAGTATGTTTCCAAACAGATGTGA 1528
DB CCATCATGACGACACACCTGCGCTGAGATCTTCAATGATGATGATGATGATGATGATGAT 1560
QY 1501 CCATCATGACGACACACCTGCGCTGAGATCTTCAATGATGATGATGATGATGATGATGAT 1560
DB CCATCATGACGACACACCTGCGCTGAGATCTTCAATGATGATGATGATGATGATGATGAT 1588
QY 1529 CCATCATGACGACACACCTGCGCTGAGATCTTCAATGATGATGATGATGATGATGATGAT 1588
DB GGTCCCGTGGGGGCTGCGCGCTGAGATGATGATGATGATGATGATGATGATGATGATGAT 1620
QY 1561 GGTCCCGTGGGGGCTGCGCGCTGAGATGATGATGATGATGATGATGATGATGATGATGAT 1620
DB GGTCCCGTGGGGGCTGCGCGCTGAGATGATGATGATGATGATGATGATGATGATGATGAT 1648
QY 1589 GGTCCCGTGGGGGCTGCGCGCTGAGATGATGATGATGATGATGATGATGATGATGATGAT 1648
DB TCACCCCGTGTTCACAGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1680
QY 1621 TCACCCCGTGTTCACAGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1680
DB TCACCCCGTGTTCACAGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1708
QY 1649 TCACCCCGTGTTCACAGGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1708
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QY 1681 AGGTAGAGGCTTGGGAAACCCATGCTTGGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740
DB AGGTAGAGGCTTGGGAAACCCATGCTTGGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1768
QY 1709 AGGTAGAGGCTTGGGAAACCCATGCTTGGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1768
DB AGGTAGAGGCTTGGGAAACCCATGCTTGGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1800
QY 1741 AGATTTCATTTGAAGTCTTGTGCAAGGCTGTGCTTGTCTTGTCTGATGCGCAAGA 1800
DB AGATTTCATTTGAAGTCTTGTGCAAGGCTGTGCTTGTCTTGTCTGATGCGCAAGA 1828
QY 1769 AGATTTCATTTGAAGTCTTGTGCAAGGCTGTGCTTGTCTTGTCTGATGCGCAAGA 1828
DB CAATGCGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1860
QY 1801 CAATGCGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1860
DB CAATGCGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1888
QY 1829 CAATGCGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1888
DB CGTGGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1920
QY 1861 CGTGGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1920
DB CGTGGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1948
QY 1889 CGTGGCTGCGGAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGTCAAGT 1948
DB TGGATTAAGTACAGGCTGACCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
QY 1921 TGGATTAAGTACAGGCTGACCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
DB TGGATTAAGTACAGGCTGACCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2008
QY 1949 TGGATTAAGTACAGGCTGACCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2008
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QY 1981 CGTTTGGCAATGAGAGTCCCTGCGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2040

Db 449 TCAGAGTGCATGACCCCATTTGCTCTCCCAAGGATGTGAGATTCAAAATCGAGGCA 508
Qy 481 GGGGATGACTTTCCAGACACATTCACCATTAAGGCCAAAGGATTTTAACCTTGACGT 540
Db 509 GCGGATGACTTTCCAGACACATTCACCATTAAGGCCAAAGGATTTTAACCTTGACGT 568
Qy 541 CCAATCTGCGGGGGTCCATTAATGATCCCAAAAGTTTGACAGAGAACCCAGGACA 600
Db 569 CCAATCTGCGGGGGTCCATTAATGATCCCAAAAGTTTGACAGAGAACCCAGGACA 628
Qy 601 AGCTTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGCAATTTGTCAACCAATATTAG 660
Db 629 AGCTTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGCAATTTGTCAACCAATATTAG 688
Qy 661 GCTCTTTCAAGAGGCAAAATAGAGAACATTTGGCCAGGGTGGAAAGCGGTTAACAAAG 720
Db 689 GCTCTTTCAAGAGGCAAAATAGAGAACATTTGGCCAGGGTGGAAAGCGGTTAACAAAG 748
Qy 721 AGATTAAGAACACAGAGAACCTTACCACTGACGAGGATGAGCTCATCTTGGCCAGCAAG 780
Db 749 AGATTAAGAACACAGAGAACCTTACCACTGACGAGGATGAGCTCATCTTGGCCAGCAAG 808
Qy 781 AGGCTTGCGCAATGCCCCACGCTGATTTGGAGATTCAGATGTCACCTGACAGTCT 840
Db 809 AGGCTTGCGCAATGCCCCACGCTGATTTGGAGATTCAGATGTCACCTGACAGTCT 868
Qy 841 TCGATGCGCCGACCTGTTTCCACTGCCCCGGAATGTTTGACACATCTGACAGAGTGC 900
Db 869 TCGATGCGCCGACCTGTTTCCACTGCCCCGGAATGTTTGACACATCTGACAGAGTGC 928
Qy 901 GTTACTCCACCAATGAGCAATGAGTACAGTGGGCAATCAGCTGTTTCCGCCAGGAGT 960
Db 929 GTTACTCCACCAATGAGCAATGAGTACAGTGGGCAATCAGCTGTTTCCGCCAGGAGT 988
Qy 961 ATGGCAAGCACGACTTCCGGGTGTGCAATCTAGCTATCCGCTATGCTGGCTACCAAG 1020
Db 989 ATGGCAAGCACGACTTCCGGGTGTGCAATCTAGCTATCCGCTATGCTGGCTACCAAG 1048
Qy 1021 TGGCAGATGAGATGAGAGAGGAGCCCTGCAACGGAATGCACTGACAGCTGATGATG 1080
Db 1049 TGGCAGATGAGATGAGAGAGGAGCCCTGCAACGGAATGCACTGACAGCTGATGATG 1108
Qy 1081 ACCTGGGCTGGAAAGCCCAAGTACGCGCTTGCATGTGTGTCCTGCTGCTGACAGCA 1140
Db 1109 ACCTGGGCTGGAAAGCCCAAGTACGCGCTTGCATGTGTGTCCTGCTGCTGACAGCA 1168
Qy 1141 ATGGCCGTGACCTGAGCTCTTGAATTCACCTGACCTTGTGCTTGAAGTGGCAATG 1200
Db 1169 ATGGCCGTGACCTGAGCTCTTGAATTCACCTGACCTTGTGCTTGAAGTGGCAATG 1228
Qy 1201 AACATCCCAATATGAGTGGTTCGGGACGAGTAAAGTGGTACGCTGCTGCTGCTGAC 1260
Db 1229 AACATCCCAATATGAGTGGTTCGGGACGAGTAAAGTGGTACGCTGCTGCTGCTGAC 1288
Qy 1261 TGGCCAAATGCTGCTTGAAGTGGGCGCTTGCATGTGTGTCCTGCTGCTGACAGCA 1320
Db 1289 TGGCCAAATGCTGCTTGAAGTGGGCGCTTGCATGTGTGTCCTGCTGCTGACAGCA 1348
Qy 1321 GGTACATGAGGACAGAGATGAGATCCGGGACCTTGTGACGTCACAGCTGACAACTTC 1380
Db 1349 GGTACATGAGGACAGAGATGAGATCCGGGACCTTGTGACGTCACAGCTGACAACTTC 1408
Qy 1381 TGGAGAGATGAGGACAGAGATGAGGCTTGAAGAGCAGCAAGCTGCTGCTGCTGAGAG 1440
Db 1409 TGGAGAGATGAGGACAGAGATGAGGCTTGAAGAGCAGCAAGCTGCTGCTGCTGAGAG 1468
Qy 1441 ACCAGGCTGCTGTTGAGATCAACATTTGCTGATCATACTTTTCAAGAGCAAGATGTA 1500
Db 1469 ACCAGGCTGCTGTTGAGATCAACATTTGCTGATCATACTTTTCAAGAGCAAGATGTA 1528
Qy 1501 CCATCATGAGACACAGCTGCTGCTGCAAGATCTTCAATGAATTAATGAGATTAATGAC 1560
Db 1529 CCATCATGAGACACAGCTGCTGCTGCAAGATCTTCAATGAATTAATGAGATTAATGAC 1588

Qy 1561 GGTCCCGTGGGGGCTGCCCGCAGATGATTTGGTGTGCTCCCTCCATGCTTGAGACA 1620
Db 1589 GGTCCCGTGGGGGCTGCCCGCAGATGATTTGGTGTGCTCCCTCCATGCTTGAGACA 1648
Qy 1621 TCACCCCGTGTTCACAGAGAGATGCTGAATCTAGTCTGTGCTCCCTTCTACTATTC 1680
Db 1649 TCACCCCGTGTTCACAGAGAGATGCTGAATCTAGTCTGTGCTCCCTTCTACTATTC 1708
Qy 1681 AGGTAGAGGCTGGAAAACCATGCTGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740
Db 1709 AGGTAGAGGCTGGAAAACCATGCTGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1768
Qy 1741 AGATTCATGAAAGCTTGTGCTCAAGCTGCTGCTTGTGCTGCTATGCTGATGCGCAAG 1800
Db 1769 AGATTCATGAAAGCTTGTGCTCAAGCTGCTGCTTGTGCTGCTATGCTGATGCGCAAG 1828
Qy 1801 CAATGGCTCCCGAGCTCAGAGTCAACATCTCTTTTGGACAGAGACAGAGAAATCAGAG 1860
Db 1829 CAATGGCTCCCGAGCTCAGAGTCAACATCTCTTTTGGACAGAGACAGAGAAATCAGAG 1888
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Db 1889 CGCTGGCTGGAGCTGGGGGCTTATCAGTGTGCTTCAACCCCAAGGTTGCTGCA 1948
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Db 1949 TGGATTAAGTACAGGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2008
Qy 1981 CTTTGGCAATGAGACGCTGCTGCAATGAGAGAAATCTGAAGAAATCGCTTTCAATGC 2040
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Qy 2041 TGAAGAGCTCAACAACAAATTCAGGTAGCGCTGTTTGGCTGGCTCCAGATGATAC 2100
Db 2069 TGAAGAGCTCAACAACAAATTCAGGTAGCGCTGTTTGGCTGGCTCCAGATGATAC 2128
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Db 2129 CTGGGTTGCGGCTTGTGCTATGATGATGATGATGATGATGATGATGATGATGATG 2188
Qy 2161 AGCTACCCCGATGGAG 2220
Db 2189 AGCTACCCCGATGGAG 2248
Qy 2221 GGGCGGTGCAACCTTCAAGGAGAGCTGAGAGAGCTTGTGATGCTGAGAGAGAGAG 2280
Db 2249 GGGCGGTGCAACCTTCAAGGAGAGCTGAGAGAGCTTGTGATGCTGAGAGAGAGAG 2308
Qy 2281 TTCAGATCCCAAGCTCTACACCTCCAAATGTGACCTGGAGCCGACCACTACAGGCTG 2340
Db 2309 TTCAGATCCCAAGCTCTACACCTCCAAATGTGACCTGGAGCCGACCACTACAGGCTG 2368
Qy 2341 TGCAGACTCACAGCTTTGGAGCTCAGCAAGCCCTCGAGAGATGATGATGATGATGAT 2400
Db 2369 TGCAGACTCACAGCTTTGGAGCTCAGCAAGCCCTCGAGAGATGATGATGATGATGAT 2428
Qy 2401 TGTTCACATGAGAGCTCAATCTGCGAGAGATCTCAAAAGTCCGACATCCAGCTGACA 2460
Db 2429 TGTTCACATGAGAGCTCAATCTGCGAGAGATCTCAAAAGTCCGACATCCAGCTGACA 2488
Qy 2461 CCAATCTGTGAGACTCTCTGTGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2520
Db 2489 CCAATCTGTGAGACTCTCTGTGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2548
Qy 2521 ACCCTGGGGTTTCCAGAGAACAGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2580
Db 2549 ACCCTGGGGTTTCCAGAGAACAGCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2608
Qy 2581 TGGATGGCCCAACCCCAACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2640
Db 2609 TGGATGGCCCAACCCCAACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2668

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QY 2641 ACTGGGTCACTGCAAGAGAGGCTGCCCCCTGCTCACTCAAGAGGCTTCACTACTCC 2700
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Db 2669 ACTGGGTCACTGCAAGAGAGGCTGCCCCCTGCTCACTCAAGAGGCTTCACTACTCC 2728
QY 2701 CGGACATTCACACACACCCCAACCCACCTGCTGCTCCAAAGCTGGCCGACAG 2760
    |||||||
Db 2729 TGGACATTCACACACACCCCAACCCACCTGCTGCTCCAAAGCTGGCCGACAG 2788
QY 2761 AAGAGCCTGAGAGACAGAGAGGCTGAGAGGCTGAGAGGCTTGCAGGCTTCAAGTACACAGTGA 2820
    |||||||
Db 2789 AAGAGCCTGAGAGACAGAGAGGCTGAGAGGCTTGCAGGCTTCAAGTACACAGTGA 2848
QY 2821 AGTTTCAACCAAGAGGCTTCAAGTACAGAGGCTTCAAGTACAGAGGCTTCAAGTACAG 2880
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Db 2849 AGTTTCAACCAAGAGGCTTCAAGTACAGAGGCTTCAAGTACAGAGGCTTCAAGTACAG 2908
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QY 2941 CCTCCGGGATCACAGGCTTCAAGTACAGAGGCTTCAAGTACAGAGGCTTCAAGTACAG 3000
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Db 3149 ATCCCTCCATCTTGCATCTCTCATGCGGCTTGCACAGAGGCTTGCCTTCCGCACTT 3208
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QY 3301 TGGCCAGAGAGGAGGCTGCTGATGCGTGCACACAGCCTATTTCCCGCTGCTGCAAGC 3360
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Db 3329 TGGCCAGAGAGGAGGCTGCTGATGCGTGCACACAGCCTATTTCCCGCTGCTGCAAGC 3388
QY 3361 CCAAG 3365
    |||||
Db 3389 CCAAG 3393

RESULT 9
: Sequence 292, Application us/60443566
: GENERAL INFORMATION:
: APPLICANT: CARBIL, Michele
: APPLICANT: BEGOVICH, Ann
: TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
: FILE REFERENCE: CLO01447
: CURRENT APPLICATION NUMBER: US/60/443,566
: CURRENT FILING DATE: 2003-01-30
: NUMBER OF SEQ ID NOS: 25102
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 292
: LENGTH: 4131
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-60-443-566-292

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Query Match 66.8%; Score 2769; DB 9; Length 4131;

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Best Local Similarity 99.4%; Pred. No. 0;
Matches 4109; Conservative 0; Mismatches 22; Indels 2; Gaps 2;

QY 13 CTCTGGCCACCTTTGATGAGGAGGAGTGGGAGTTCAGACAGTCCGGAATTCAGAG 72
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Db 1 CTCTGGCCACCTTTGATGAGGAGGAGTGGGAGTTCAGACAGTCCGGAATTCAGAG 60
QY 73 CACAGGTCTCTCTGCTTGTGACTGCTTACCCCGGGAGGAGTGCACCGCTGCA 132
    |||||||
Db 61 CACAGGTCTCTCTGCTTGTGACTGCTTACCCCGGGAGGAGTGCACCGCTGCA 120
QY 133 GCCCAGAGTGAAGACATCTGAGCTCAATTCAGATTAATGACATAGAGCTGCTT 192
    |||||||
Db 121 GCCCAGAGTGAAGACATCTGAGCTCAATTCAGATTAATGACATAGAGCTGCTT 180
QY 193 GTAAAGCATAGAGATGGCTTCTTGGAAATTTCTGTTCAAGACCAATTCACAGT 252
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Db 181 GTAAAGCATAGAGATGGCTTCTTGGAAATTTCTGTTCAAGACCAATTCACAGT 240
QY 253 ATGCAATGAATGGGAAAGAAAGACATCAACAATGAGGAAAGCCCTGTGCCACT 312
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QY 313 CCAATCCAGTGAACAAGATGACCTTCAGTATCAACAACCTCAGACAGCAGAGATGAGT 372
    |||||||
Db 301 CCAATCCAGTGAACAAGATGACCTTCAGTATCAACAACCTCAGACAGCAGAGATGAGT 360
QY 373 CCGCGGAGCCGCTGCTGAGAGACGGGAAAGAGTCTCAGATTTCTGTTCAAGCTGATG 432
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Db 361 CCGCGGAGCCGCTGCTGAGAGACGGGAAAGAGTCTCAGATTTCTGTTCAAGCTGATG 420
QY 433 CAACCCCATTTGCTCCCTCCACGAGTGTGAGATCAAAAAGTGGGAGGAGGATGACT 492
    |||||||
Db 421 CAACCCCATTTGCTCCCTCCACGAGTGTGAGATCAAAAAGTGGGAGGAGGATGACT 480
QY 493 TTCAGAGACACTTTCACATTAAGGCAAGGATTTTAACTTGACAGTCCAAATCTTGC 552
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Db 481 TTCAGAGACACTTTCACATTAAGGCAAGGATTTTAACTTGACAGTCCAAATCTTGC 540
QY 553 TGGGCTCATTTATGACTCCCAAAAGTTTGACGAGAGGACCGAGGAGCAAGCTTACCCCTC 612
    |||||||
Db 541 TGGGCTCATTTATGACTCCCAAAAGTTTGACGAGAGGACCGAGGAGCAAGCTTACCCCTC 600
QY 613 CAGATGAGCTTTCACCTCAAGCTATGGAATTTGTCAACCAATTAACGGCTCTTCAAG 672
    |||||||
Db 601 CAGATGAGCTTTCACCTCAAGCTATGGAATTTGTCAACCAATTAACGGCTCTTCAAG 660
QY 673 AGGCAAAATAGAGAAACATCTGCGCAGGGTGAAGCGGTAAACAAGAGATGAACAA 732
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Db 661 AGGCAAAATAGAGAAACATCTGCGCAGGGTGAAGCGGTAAACAAGAGATGAACAA 720
QY 733 CAGAGACTTACAACTGAGAGGAGATGAGCTATCTTGCACCAAGCGGCTGGGCA 792
    |||||||
Db 721 CAGAGACTTACAACTGAGAGGAGATGAGCTATCTTGCACCAAGCGGCTGGGCA 780
QY 793 ATGCCCAAGCTGATGAGAGAGATCAGTGTCCAACTGCAAGGTCTTGCATGCCCA 852
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Db 781 ATGCCCAAGCTGATGAGAGAGATCAGTGTCCAACTGCAAGGTCTTGCATGCCCA 840
QY 853 GCGTTTCACCTGCGCGGAAATTTGAACACATCTGCAGACAGTGGCTTACTCCACA 912
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Db 841 GCGTTTCACCTGCGCGGAAATTTGAACACATCTGCAGACAGTGGCTTACTCCACA 900
QY 913 ACAATGGCAACATCAGGTGGGCTACACAGTGTGCCCCAGGAGGATGAGCAAGAG 972
    |||||||
Db 901 ACAATGGCAACATCAGGTGGGCTACACAGTGTGCCCCAGGAGGATGAGCAAGAG 960
QY 973 ACTTCGGGTGTGAGATGCTCAGCTATCCGCTATGCTGATCCAGATGCGCAGATGCA 1032
    |||||||
Db 961 ACTTCGGGTGTGAGATGCTCAGCTATCCGCTATGCTGATCCAGATGCGCAGATGCA 1020
QY 1033 GCATCAGAGGAGCCCTGCAACGTGGAATTCACAGCTGCTGCACTGAGCTGGGCTGCA 1092
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Db 1021 GCATCAGAGGAGACCTGCCAACGTGGATTCACTAGCTGTGCATCAGCTGGGCTGGA 1080
Qy 1093 AGCCCAAGTACGGCGCTTGGATGTGTCCTCCCTGGTCCCTGAGGCGCAATGGCGTGAAC 1152
Db 1081 AGCCCAAGTACGGCGCTTGGATGTGTCCTCCCTGGTCCCTGAGGCGCAATGGCGTGAAC 1140
Qy 1153 CTGAGCTCTTGAATCCCACTGACCTTGTGCTTGAAGTGGCCATGGAATCCCAAT 1212
Db 1141 CTGAGCTCTTGAATCCCACTGACCTTGTGCTTGAAGTGGCCATGGAATCCCAAT 1200
Qy 1213 ACAGTGTGTTCCGGAACTGGAGCTAAAGTGAACGCCCTGCCCTGACGTGGCCCAATGC 1272
Db 1201 ACAGTGTGTTCCGGAACTGGAGCTAAAGTGAACGCCCTGCCCTGACGTGGCCCAATGC 1260
Qy 1273 TGTCTGAGGTGGCGGCTTGGAGTTCCTCAGGAGTCCCTTCATGCTGCTGATGAGGCA 1332
Db 1261 TGTCTGAGGTGGCGGCTTGGAGTTCCTCAGGAGTCCCTTCATGCTGCTGATGAGGCA 1320
Qy 1333 CAGAGATCGAGTCCGGGACTTGTGACGTCAGCGCTCAACATCCTTGGAGAGTGG 1392
Db 1321 CAGAGATCGAGTCCGGGACTTGTGACGTCAGCGCTCAACATCCTTGGAGAGTGG 1380
Qy 1393 GCAGAGAAATGGGCTTGGAAACGCAAGCTGGCTGCTGGAAGACCGAGCTGCG 1452
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Qy 1693 GGAAGAACCATGTCTGAG 1752
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Db 1861 ACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGGTTGCTGATGATGATGATGATG 1920
Qy 1933 GAGTCAGCTGCTGAG 1992
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Qy 1993 GAGTCAGCTGCTGAG 2052
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Qy 2053 ACAAGAAATTCAGTACCTGTGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2112
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Qy 2113 CCTTGTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2172
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Db 2401 GAGTCAGTCTGAGGAG 2460
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QY 2218 GCTGGGGCGTGCACAACTCTTCAAGGAGGCTGTGAAGAGTTGATGTCCGAGGCAAGAGC 2277
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QY 3838 CAACTGAGAGGCTGATGCTGAGAGGCTTCCGCTGAGCA 3897
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RESULT 11
US-09-724-676A-37686
Sequence 37686, Application US/09724676A
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
SEQ ID NO 37686
LENGTH: 4062
TYPE: DNA
ORGANISM: Homo sapiens
US-09-724-676A-37686

Query Match		55.2%	Score 2287	DB 6	Length 4062
Best Local Similarity		99.6%	Pred. No. 0		
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QY	1198	TGGAACATCCCAATACGAGTGTTCGGGAACGTGAGCTAAAGTGTACGCCCTCCCTG	1257		
Db	1109	TGGAACATCCCAATACGAGTGTTCGGGAACGTGAGCTAAAGTGTACGCCCTCCCTG	1168		
QY	1258	CAGTGGCCAAACATGCTGCTTGAGGTGGGGGCGCTGAGTGTCCAGGGTCCCTTCATG	1317		
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QY	1318	GCTGTACATGGGCACAGAGATCGAGTCCGGGACTCTGTGACGTCCAGGCTACACA	1377		
Db	1229	GCTGTACATGGGCACAGAGATCGAGTCCGGGACTCTGTGACGTCCAGGCTACACA	1288		
QY	1378	TCTTGAGGAAAGTGGGCAGAGAGTGGGCTTGAAAACGCAAGCTGGGCTGCTGTGA	1437		
Db	1289	TCTTGAGGAAAGTGGGCAGAGAGTGGGCTTGAAAACGCAAGCTGGGCTGCTGTGA	1348		
QY	1438	AAGACAGGCTGTGCTTGGATCAACATTTGCTGTATCCATGATTTTCAGAAAGCAGATG	1497		
Db	1349	AAGACAGGCTGTGCTTGGATCAACATTTGCTGTGTCCATGATTTTCAGAAAGCAGATG	1408		
QY	1498	TGACCATCATGAGACACCACTGGGCTGCAGATTCCTCATGAAAGTACATGACAGATGAT	1557		
Db	1409	TGACCATCATGAGACACCACTGGGCTGCAGATTCCTCATGAAAGTACATGACAGATGAT	1468		
QY	1558	ACCGGTCCCGTGGGGCTGCCCCGCGACGTGATTTGGCTGCCCTCCCATGCTGTGGA	1617		
Db	1469	ACCGGTCCCGTGGGGCTGCCCCGCGACGTGATTTGGCTGCCCTCCCATGCTGTGGA	1528		
QY	1618	GCATCACCCTGTTTCCACGAGAGTGTCTAACTACGTCCCTGTCCTTCTACTACT	1677		
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QY	1678	ATCAGTAGAGGCTGGAAAACCCATGTCTGCGAGAGACAGAAAGCGAGACCCAGACAA	1737		
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QY	1738	GAGAGATTCATTTGAAAGTCTTGCTCAAAAGCTGTGCTCTTTGCTGTATGCTGATGCGCA	1797		
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QY	1798	AACATATGGGCTCCCGAGTCAAGTACCATCTCTTTGGCGACAGACAGAAAATATAG	1857		
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QY	1858	AGGCGCTGGGCTGGGACCTGGGGGCGCTTATTCAGCTGTGCTTCAACCCCAAGTGTGCT	1917		
Db	1769	AGGCGCTGGGCTGGGACCTGGGGGCGCTTATTCAGCTGTGCTTCAACCCCAAGTGTGCT	1828		
QY	1918	GCATGGATTAAGTACAGGCTGAGCTGCTGGAGAGAAACGGCTGCTGTTGGTGTGACCA	1977		
Db	1829	GCATGGATTAAGTACAGGCTGAGCTGCTGGAGAGAAACGGCTGCTGTTGGTGTGACCA	1888		
QY	1978	GTACGTTTTGGCAATGAGACGTGCGCTTGCCCATGAGAGAAACTGAAAGAAATCGCTTCA	2037		
Db	1889	GTACGTTTTGGCAATGAGACGTGCGCTTGCCCATGAGAGAAACTGAAAGAAATCGCTTCA	1948		
QY	2038	TGCTGAAGAGCTCAACAACAATTCAGGTACGCTGTGTTGGCTCGGCTCCACAGCATGT	2097		
Db	1949	TGCTGAAGAGCTCAACAACAATTCAGGTACGCTGTGTTGGCTCGGCTCCACAGCATGT	2008		
QY	2098	ACCCCTGGTTCGGGCTTTTGCTCATGACATTTGATCAGAAAGCTGTGCCACCTGGGGGCT	2157		
Db	2009	ACCCCTGGTTCGGGCTTTTGCTCATGACATTTGATCAGAAAGCTGTGCCACCTGGGGGCT	2068		
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QY	2518	AGCACCCTGGGGTTTGCCCGAGGACACGCGGCGCTGGTCCAAAGCATCCTGGAGGAG	2577
Db	2429	AGCACCCTGGGGTTTGCCCGAGGACACGCGGCGCTGGTCCAAAGCATCCTGGAGGAG	2488
QY	2578	TGGTGGATGGCCCCACACCCACCAAGACAGTGGGCTGGAGGACCTGGATGAGAGTGCA	2637
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QY	2758	CAGAGAGGCTGAGAGACAGAGGCTGGAGGCCCTGTGCCAGGCGCTCAGAGTACAGCAAGT	2817
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QY	2818	GGAAGTTACCAACAGGCCCACTTCCTGAGGTGTGAGAGAGTTCCCGCTCGGGGG	2877
Db	2729	GGAAGTTACCAACAGGCCCACTTCCTGAGGTGTGAGAGAGTTCCCGCTCGGGGG	2788
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Db	2789	TGTCGTGGGCTTCTGCTTTCACAGCTCCCAATCTGAAGGCCAGGTTTACTACTCATCA	2848
QY	2938	GCTCCTCCGGGAAATCACAGCCCCAGGAGAAATCCACTCAAGTGTGGCCGTGACTACAC	2997
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QY	3058	TGAAGCCCCCAAGACCCAGTGCCTGCTTGTGCGGAATGCCAGGCGCTTCCACTCCCG	3117
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QY	3118	AGATATCCCTCCCATCTGATGATGATGATGGGCTGGGACAGAGGATGGTGCCTTCCGCA	3177
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QY	3178	GTTTCTTGCGACGAAGGGCTCCATGACTCCCAAGGAGGATGGGAGGCGCCGACATGA	3237
Db	3089	GTTTCTTGCGACGAAGGGCTCCATGACTCCCAAGGAGGATGGGAGGCGCCGACATGA	3148
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Db 3629 CCAGCTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 3688
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QY 3838 CAACTGACACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 3897
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QY 3958 AGTGACACCTTCAAGTGACACACAGGA 3985
Db 3869 AGTGACACCTTCAAGTGACACACAGGA 3896

RESULT 12
US-09-724-676-37688
; Sequence 37688, Application US/09724676
; GENERAL INFORMATION:
; APPLICANT: Compugen LTD
; TITLE OF INVENTION: Variants of alternative splicing
; FILE REFERENCE: 129181.4 Compugen
; CURRENT APPLICATION NUMBER: US/09/724,676
; NUMBER OF SEQ ID NOS: 97222
; SOFTWARE: Patent version 3.2
; SEQ ID NO 37688
; LENGTH: 3867
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-724-676-37688

Query Match 42.7%; Score 1769; DB 6; Length 3867;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 2219; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 1138 CCAATGGCCGAGACCTGAGCTCTTGCAGAAATCCACCTGACCTTGTGCTGAGGTGGCA 1197

Db 1049 CCAATGGCCGAGACCTGAGCTCTTGCAGAAATCCACCTGACCTTGTGCTGAGGTGGCA 1108
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Db 1169 CAGTGGCCCAATATGCTGCTGAGAGTGGGGGCTTGAAGTTCAGAGGTGCGCCCTTCAATG 1228
QY 1318 GCTGTACATGAGGACAGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAG 1377
Db 1229 GCTGTACATGAGGACAGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAG 1288
QY 1378 TCCCGAG 1437
Db 1289 TCCCGAG 1348
QY 1438 AAGACAGAGCTGCTGTTGAGATCAACATTCCTGTGATCCATAGTTTTCAGAGCAGATG 1497
Db 1349 AAGACAGAGCTGCTGTTGAGATCAACATTCCTGTGATCCATAGTTTTCAGAGCAGATG 1408
QY 1498 TGACCATCATGAGACACACACTCGGCTGACAGATCTTTCATGAGATGATGATGATGATG 1557
Db 1409 TGACCATCATGAGACACACACTCGGCTGACAGATCTTTCATGAGATGATGATGATGATG 1468
QY 1558 ACCGCTCCCGTGGGGGGGCTGGCCGAGAGATGAGATGAGATGAGATGAGATGAGATGAG 1617
Db 1469 ACCGCTCCCGTGGGGGGGCTGGCCGAGAGATGAGATGAGATGAGATGAGATGAGATGAG 1528
QY 1618 GCATCACCCTCGTGTTCACAGAGAGATGCTGATGATGATGATGATGATGATGATGATGATG 1677
Db 1529 GCATCACCCTCGTGTTCACAGAGAGATGCTGATGATGATGATGATGATGATGATGATGATG 1588
QY 1678 ATCAGATGAGAGCTGGAAGAACCTATGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1737
Db 1589 ATCAGATGAGAGCTGGAAGAACCTATGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1648
QY 1738 GAGAGATTCATGTAAGTCTTGTGCAAGCTGATGCTTGTGCTGATGCTGATGCTGATGCTG 1797
Db 1649 GAGAGATTCATGTAAGTCTTGTGCAAGCTGATGCTGATGCTGATGCTGATGCTGATGCTG 1708
QY 1798 AGACATGAGCTCCGAGCTGAGAGTCAACATCTCTTTGCGACAGAGAGAGAGAGAGAGAG 1857
Db 1709 AGACATGAGCTCCGAGCTGAGAGTCAACATCTCTTTGCGACAGAGAGAGAGAGAGAGAG 1768
QY 1858 AGGCGCTGGCTGGAGAGCTGGGGGCTTATTCAGCTGCTTCAACCCCAAGGTTGTCT 1917
Db 1769 AGGCGCTGGCTGGAGAGCTGGGGGCTTATTCAGCTGCTTCAACCCCAAGGTTGTCT 1828
QY 1918 GCATGATTAAGTACAGAGCTGAGAGTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1977
Db 1829 GCATGATTAAGTACAGAGCTGAGAGTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1888
QY 1978 GTACCTTTGGCAATGAGAGTCCCTGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2037
Db 1889 GTACCTTTGGCAATGAGAGTCCCTGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1948
QY 2038 TGCTGAAGAGTCAACAAATTCAGATGAGAGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 2097
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Db 2009 ACCCTGCTTGGCTGCTTGTGCTGATGATGATGATGATGATGATGATGATGATGATGATG 2068
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Db 2069 CTCAGCTCACCCGATGAG 2128
QY 2218 GCTGGGCGGTGAAACCTTCAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2277

Db 2129 GCTGGGCGGTGCAACCTTCAAGGCGAGCTGTGAGAGCTTGTATGTCCGAGCAACAGC 2188
 Qy 2278 ACATTCAGATCCCCAAGCTCTACATTCCTCATGTGACCTGGGACCCGACACATACAGC 2337
 Db 2189 ACATTCAGATCCCCAAGCTCTACATTCCTCATGTGACCTGGGACCCGACACATACAGC 2248
 Qy 2338 TCGTGCAGAGACTCAGAGCTTTGGAAGCTCAGCAAAAGCCCTCAGCAGATGATGCCAAGA 2397
 Db 2249 TCGTGCAGAGACTCAGAGCTTTGGAAGCTCAGCAAAAGCCCTCAGCAGATGATGCCAAGA 2308
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 Qy 2458 CCACCATCTGTGTGAAGCTCTCTGTGAGATGGCCCAAGGCTGAGTACCTGCGGGGG 2517
 Db 2369 CCACCATCTGTGTGAAGCTCTCTGTGAGATGGCCCAAGGCTGAGTACCTGCGGGGG 2428
 Qy 2518 AGCACCTTGGGGTTGGCCAGGCAAGCCGCTGTGTCGAAGGATCCTGAGCGAG 2577
 Db 2429 AGCACCTTGGGGTTGGCCAGGCAAGCCGCTGTGTCGAAGGATCCTGAGCGAG 2488
 Qy 2578 TGTGTGATGGCCGACACCCACAGAGAGTGGCCTGAGAGACCTGGATGAGAGTGGCA 2637
 Db 2489 TGTGTGATGGCCGACACCCACAGAGAGTGGCCTGAGAGACCTGGATGAGAGTGGCA 2548
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 Db 2549 GCTACTGGGTGAGTGCAGAGAGGCTGCCCCCTGCTCAGTACAGCAGGCGCTGACT 2608
 Qy 2698 CCCCAGCATACACACACCCCAAGCTGCTGCTCCAAAAGCTGGCCAGTGGCA 2757
 Db 2609 TCCAGCATACACACACCCCAAGCTGCTGCTCCAAAAGCTGGCCAGTGGCA 2668
 Qy 2758 CAGAGAGCTGAGAGACAGAGCTGAGGCGCTGTGCCAGCCCTCAGAGTACAGCAAGT 2817
 Db 2669 CAGAGAGCTGAGAGACAGAGCTGAGGCGCTGTGCCAGCCCTCAGAGTACAGCAAGT 2728
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 Qy 3058 TGAAGCGCCAAAGAGAGTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3117
 Db 2969 TGAAGCGCCAAAGAGAGTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3028
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 Db 3029 AGGATCCCTCCATCTCTGATCTCTATGGGCTGAGAGAGTGTGCTGCTGCTGCTGCT 3088
 Qy 3178 GTTTCGAGAGCAAGGCTCTCATGATCTCCAGACAGAGGAGTGGGGAGGCGCCATCA 3237
 Db 3089 GTTTCGAGAGCAAGGCTCTCATGATCTCCAGACAGAGGAGTGGGGAGGCGCCATCA 3148
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 Qy 3298 AGATGGCCAGAGAGGAGTGTGATGGGCTGACAGAGCTATTCGCGCTGCTGCA 3357
 Db 3209 AGATGGCCAGAGAGGAGTGTGATGGGCTGACAGAGCTATTCGCGCTGCTGCA 3268

Qy 3358 AGCCCAAG 3365
 Db 3269 AGCCCAAG 3276

RESULT 13
 US-09-724-676A-37688
 ; Sequence 37688, Application US/09724676A
 ; GENERAL INFORMATION:
 ; APPLICANT: Comugen LTD
 ; TITLE OF INVENTION: Variants of alternative splicing
 ; FILE REFERENCE: 129181.4 Comugen
 ; CURRENT APPLICATION NUMBER: US/09/724,676A
 ; NUMBER OF SEQ ID NOS: 97222
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO: 37688
 ; LENGTH: 3867
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-09-724-676A-37688

Query Match 42.7%; Score 1769; DB 6; Length 3867;
 Best Local Similarity 99.6%; Pred. No. 0;
 Matches 2219; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

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 Qy 1198 TGAACATCCCAATATACAGTGTGCTGCGGAACTGAGACTTAAAGTGTAGGCTGCTG 1257
 Db 1109 TGAACATCCCAATATACAGTGTGCTGCGGAACTGAGACTTAAAGTGTAGGCTGCTG 1168
 Qy 1258 CAGTGGCCAACTGCTGCTTGAAGTGTGCGGCTGAGATTCACAGGCTGCTGCTGCT 1317
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 Qy 1318 GCTGTACATGGGCAACAGATGCGAGTCCGAGCTCTGAGAGTCCAGGCTGCTGCTG 1377
 Db 1229 GCTGTACATGGGCAACAGATGCGAGTCCGAGCTCTGAGAGTCCAGGCTGCTGCTG 1288
 Qy 1378 TCTGTGAGAGTGGGCGAGGAAATGGGCTGGAAGACAGCAAGCTGCTGCTGCTGCTG 1437
 Db 1289 TCTGTGAGAGTGGGCGAGGAAATGGGCTGGAAGACAGCAAGCTGCTGCTGCTGCTG 1348
 Qy 1438 AAGACCAAGCTGTGCTGAGATCAATGCTGTGATTCATAGTTTTCAGAAAGCAATG 1497
 Db 1349 AAGACCAAGCTGTGCTGAGATCAATGCTGTGATTCATAGTTTTCAGAAAGCAATG 1408
 Qy 1498 TGACCATGATGAGACACACACTGCGGCTGAGAAATCCCTCATGAAGTATCATGCAATGAAT 1557
 Db 1409 TGACCATGATGAGACACACACTGCGGCTGAGAAATCCCTCATGAAGTATCATGCAATGAAT 1468
 Qy 1558 ACCGCTCCGTTGGGGGCTGCCCGGACAGACTGATTTGGTGGTCCCTCCATGCTGGGA 1617
 Db 1469 ACCGCTCCGTTGGGGGCTGCCCGGACAGACTGATTTGGTGGTCCCTCCATGCTGGGA 1528
 Qy 1618 GCATCACCCTGCTGCTTACAGAGAGTGTGAGACTGAGTCTGCTGCTGCTGCTGCTGCT 1677
 Db 1529 GCATCACCCTGCTGCTTACAGAGAGTGTGAGACTGAGTCTGCTGCTGCTGCTGCTGCT 1588
 Qy 1678 ATCAGTAGAGGCTGGAAGAACCATCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1737
 Db 1589 ATCAGTAGAGGCTGGAAGAACCATCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1648
 Qy 1738 GAGGATTCATTTGAAGTCTTGTGCAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1797
 Db 1649 GAGGATTCATTTGAAGTCTTGTGCAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1708
 Qy 1798 AGACAAATGGGCTGCGGAGTACAGTACCATCTCTTGTGAGAGAGAGAGAGAGAGAGAG 1857

Db 1709 AGACATGCGCTCCGAGTCAAGAGTCAACATCTCTTTGCGACAGAGACGAGAAATCAG 1768
 Qy 1858 AGGCGCTGGCCCTGGGAGCTGGGGGGCTTATTCAGCTGTGCCCTTCAACCCAGGCTGTCT 1917
 Db 1769 AGGCGCTGGCCCTGGGAGCTGGGGGGCTTATTCAGCTGTGCCCTTCAACCCAGGCTGTCT 1828
 Qy 1918 GCATGATTAAGTACAGAGCTGAGCTGCTGAGAGAGAAAGGCTGCTGTTGTGTGACCA 1977
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 Qy 1978 GTACCTTTGGCAATGAGAGCTGCTGAGAGAGAAAGGCTGCTGTTGTGTGACCA 2037
 Db 1889 GTACCTTTGGCAATGAGAGCTGCTGAGAGAGAAAGGCTGCTGTTGTGTGACCA 1948
 Qy 2038 TGCTTAAGAGAGTCAACAAATTCAGGTACGCTGTGTTGGCTGGCTCCAGATGT 2097
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 Qy 2218 GCTGGGCGCTGCAACCTTCAAGGAGAGCTGTGAGAGCTGTTGATGTCGAGGCAAAAGC 2277
 Db 2129 GCTGGGCGCTGCAACCTTCAAGGAGAGCTGTGAGAGCTGTTGATGTCGAGGCAAAAGC 2188
 Qy 2278 ACATTCAGATCCCAAGCTCTACACCTCCATGTGACCTGGGAGCCGACACCTACAGGC 2337
 Db 2189 ACATTCAGATCCCAAGCTCTACACCTCCATGTGACCTGGGAGCCGACACCTACAGGC 2248
 Qy 2338 TCGTGCAAGAGTCAAGAGCTTTGGACCTCAGCAAAAGCCCTCAGCAGCTGCTGCCAGA 2397
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 Qy 2398 ACCTGTTACCATGAGGCTTCAATCTCGGAGATCTCAAAAGTCCGACATCAGCCGCTG 2457
 Db 2309 ACCTGTTACCATGAGGCTTCAATCTCGGAGATCTCAAAAGTCCGACATCAGCCGCTG 2368
 Qy 2458 CCACCATCTGTGTGAGTCTCTCTGTGAGATGGCCAAAGCCCTGAACTGCTGCGGGGG 2517
 Db 2369 CCACCATCTGTGTGAGTCTCTCTGTGAGATGGCCAAAGCCCTGAACTGCTGCGGGGG 2428
 Qy 2518 AGCACTTGGGGTGGTGGCCAGGACCAACGCGCCCTGTGCAAGGATCTGGAAGCGAG 2577
 Db 2429 AGCACTTGGGGTGGTGGCCAGGACCAACGCGCCCTGTGCAAGGATCTGGAAGCGAG 2488
 Qy 2578 TGTGTGATGGCCCAACACCAACAGAGTGGCTGGAGAGCTGGATGAGATGGCA 2637
 Db 2489 TGTGTGATGGCCCAACACCAACAGAGTGGCTGGAGAGCTGGATGAGATGGCA 2548
 Qy 2638 GCTACTGGGTGAGTGAAGAGGCTGCCCCCTGTCTCACTAGCCAGGAGCCCTCACCTACT 2697
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 Qy 2698 CCCGGGATATACCAACACCCCAACCCAGCTGTCTGTCCAAAAGTGGCCCAAGGTGGCCA 2757
 Db 2609 TCTGTGATATACCAACACCCCAACCCAGCTGTCTGTCCAAAAGTGGCCCAAGGTGGCCA 2668
 Qy 2758 CAGAAGAGCTGAGAGAGAGAGGCTGTGAGGCTGTGCGAGCCCTCAGAGTACACAGT 2817
 Db 2669 CAGAAGAGCTGAGAGAGAGAGGCTGTGAGGCTGTGCGAGCCCTCAGAGTACACAGT 2728
 Qy 2818 GGAAGTTACCAACAGAGAGAGGCTGTGAGGCTGTGAGAGGTTCCGTTCCGTCGGG 2877
 Db 2729 GGAAGTTACCAACAGAGAGAGGCTGTGAGGCTGTGAGAGGTTCCGTTCCGTCGGG 2788
 Qy 2878 TGTGTGCTGGCTTCTGTGTTCCAGAGTCCCATTTGTAAGCCCAAGGTTTACATCCATCA 2937
 Db 2789 TGTGTGCTGGCTTCTGTGTTCCAGAGTCCCATTTGTAAGCCCAAGGTTTACATCCATCA 2848

Qy 2938 GCTCCCTCCGAGATGACAGAGCCAGAGATGACATGACTGTGGCCGTGCTACCTACC 2997
 Db 2849 GCTCCCTCCGAGATGACAGAGCCAGAGATGACATGACTGTGGCCGTGCTACCTACC 2908
 Qy 2998 ACACCGAGATGCGAGAGGCTCCCTGACACAGAGTGTGACAGACATGAGCTCAACAGCC 3057
 Db 2909 ACACCGAGATGCGAGAGGCTCCCTGACACAGAGTGTGACAGACATGAGCTCAACAGCC 2968
 Qy 3058 TGAAGCCCAAGAGAGAGTGTGCTGTTGTGCGAGAGTGTGAGAGAGAGAGAGAGAG 3117
 Db 2969 TGAAGCCCAAGAGAGAGTGTGCTGTTGTGCGAGAGTGTGAGAGAGAGAGAGAGAG 3028
 Qy 3118 AGATGCCCTCCATGCTGATGCTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3177
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 Qy 3238 CTTGTGTTGTTGGTGGCCGCGCCAGATGAGAGAGAGAGAGAGAGAGAGAGAGAG 3297
 Db 3149 CTTGTGTTGTTGGTGGCCGCGCCAGATGAGAGAGAGAGAGAGAGAGAGAGAGAG 3208
 Qy 3298 AGATGGCCCAAGAGAGAGAGTGTGATGCTGCTGACACAGAGAGAGAGAGAGAGAG 3357
 Db 3209 AGATGGCCCAAGAGAGAGAGTGTGATGCTGCTGACACAGAGAGAGAGAGAGAGAG 3268
 Qy 3358 AGCCCAAG 3365
 Db 3269 AGCCCAAG 3276

RESULT 14
 US-09-724-676-37687
 ; Sequence 37687, Application US/09724676
 ; GENERAL INFORMATION:
 ; APPLICANT: Comugen LTD
 ; TITLE OF INVENTION: Variants of alternative splicing
 ; FILE REFERENCE: 129181.4 Comugen
 ; CURRENT APPLICATION NUMBER: US/09/724, 676
 ; CURRENT FILING DATE: 2000-11-28
 ; NUMBER OF SEQ ID NOS: 97222
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 37687
 ; LENGTH: 3868
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-09-724-676-37687

Query Match 42.7%; Score 1769; DB 6; Length 3868;
 Best Local Similarity 99.6%; Pred. No. 0;
 Matches 2219; Conservative 0; Mismatches 9; Indels 0; Gaps 0;
 Qy 1138 CCAATGGCGGTGACCTGAGCTTTCGAAATCCCACTGAGCTGTGAGTGGGCA 1197
 Db 1049 CCAATGGCGGTGACCTGAGCTTTCGAAATCCCACTGAGCTGTGAGTGGGCA 1108
 Qy 1198 TGAACATCCCAATACAGAGTGTTCGGAACCTGAGCTAAAGTGTACGCTGCTG 1257
 Db 1109 TGAACATCCCAATACAGAGTGTTCGGAACCTGAGCTAAAGTGTACGCTGCTG 1168
 Qy 1258 CAGTGGCAACATGCTGCTTGAAGTGGGCGCTGTGAGTGTCCAGAGGTGCCCTCAATG 1317
 Db 1169 CAGTGGCAACATGCTGCTTGAAGTGGGCGCTGTGAGTGTCCAGAGGTGCCCTCAATG 1228
 Qy 1318 GCTGTACATGGGAGAGAGATGAGATGCGGAGTCTGTGAGTGTCCAGAGGTGCCCTCAAC 1377
 Db 1229 GCTGTACATGGGAGAGATGAGATGCGGAGTCTGTGAGTGTCCAGAGGTGCCCTCAAC 1288
 Qy 1378 TCTGTGAGAGAGTGGAGAGAGATGAGCTGTGAGAGAGAGAGAGAGAGAGAGAGAGAG 1437

QY 3178 GTTCTGACAGGCTCCATGACTCCAGCACAAGGAGTCCGGGAGGCCGATGA 3237
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 Db 3089 GTTCTGACAGGCTCCATGACTCCAGCACAAGGAGTCCGGGAGGCCGATGA 3148
 QY 3238 CCTTGTGTTGGTGCCCGCCAGATGAGGACCATCTTACCAGAGAGATGCTGG 3297
 |||||||
 Db 3149 CCTTGTGTTGGTGCCCGCCAGATGAGGACCATCTTACCAGAGAGATGCTGG 3208
 QY 3298 AGATGGCCCAAGAGGGGTGCTGCATGCGGTGCACACAGCCTATTCCGCTGCTGCA 3357
 |||||||
 Db 3209 AGATGGCCCAAGAGGGGTGCTGCATGCGGTGCACACAGCCTATTCCGCTGCTGCA 3268
 QY 3358 AGCCCAAG 3365
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 Db 3269 AGCCCAAG 3276

Search completed: March 14, 2003, 16:11:33
 Job time : 974 secs

RESULT	1
AAQ66914	
ID	AAQ66914 standard; cDNA, 4145 BP.
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AC	AAQ66914;
XX	
DT	28-DEC-1994 (first entry)
XX	
DE	Sequence of the cDNA clone for human hepatocyte inducible nitric oxide synthase.
XX	
KW	Nitric oxide synthase; hepatocyte; hypotensive shock; therapy; ss
XX	
OS	Homo sapiens.
XX	
RF	Key
FT	Location/Qualifiers
FT	207..3668
XX	/tag= a
XX	
PN	W09412645-A.
XX	

PD 09-JUN-1994.
XX 23-NOV-1993; 93WO-US11401.
XX 25-NOV-1992; 92US-0981344.
XX (UPI-) UNIV PITTSBURGH.
PI Billiar TR, Geller DA, Nussler AK, Simmons RL;
DR WPI: 1994-200273/24.
DR P-PSDB: AAR55764.
XX cDNA clone encoding human inducible nitric oxide synthase - used
PT to prevent the hypotensive shock seen with sepsis.
XX
PS Claim 23; Fig 1; 53pp; English.
XX
CC AA066914 is from human hepatocyte inducible nitric oxide synthase cDNA
CC clone PHINOS from lambda Zap II cDNA library. The original source
CC was induced human hepatocyte RNA. HINOS cDNA plasmid is pref.
CC transformed in E. coli SOLR (ATCC 69126). The inventors claim a
CC clone with the cDNA sequence in AA066914 and a cDNA clone which
CC encodes AAR55764. The cloning and expression of a human tissue nitric
CC oxide synthase cDNA provides a source of the enzyme for therapeutic
CC purposes, for example to prevent the hypotensive shock seen with
CC sepsis.
XX
SQ Sequence 4145 BP; 968 A; 1203 C; 1126 G; 848 T; 0 other:

Query Match 100.0%; Score 4145; DB 15; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 CTGCTTTAAATCTCTCGGCCACCTTTGATGAGGGAGCTGGGAGTTCTAGACAGTCCG 60
OY 61 AAGTTCTCAAGGACAGGCTCTCTCTGTTGACTGTCTTACCCCGGGAGGACAGTGC 120
DB 61 AAGTTCTCAAGGACAGGCTCTCTCTGTTGACTGTCTTACCCCGGGAGGAGTGC 120
OY 121 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGACTCAATCCAGATAGTACATAA 180
DB 121 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGACTCAATCCAGATAGTACATAA 180
OY 181 GTGACCTGCTTTGTAAGCATAGAGATGGCTGTCTTGAATAATCTGTTCAGAGCA 240
DB 181 GTGACCTGCTTTGTAAGCATAGAGATGGCTGTCTTGAATAATCTGTTCAGAGCA 240
OY 241 AATTCACACAGTATGCAATGATGGGAAAAAAGACATCAACAGCATGTGAGAAAGCC 300
DB 241 AATTCACACAGTATGCAATGATGGGAAAAAAGACATCAACAGCATGTGAGAAAGCC 300
OY 301 CCTGTGCCACCTCCAGTCCAGTACAGACAGATGACCTTCAGTATCACAACCTCAGAAC 360
DB 301 CCTGTGCCACCTCCAGTCCAGTACAGACAGATGACCTTCAGTATCACAACCTCAGAAC 360
OY 361 AGCAGATGAGTCCCGGAGCCCTCGTGGAGAGCGGAAAGAGTCTCCAGAACTCTGG 420
DB 361 AGCAGATGAGTCCCGGAGCCCTCGTGGAGAGCGGAAAGAGTCTCCAGAACTCTGG 420
OY 421 TCAGCTGGATGCAACCCCATTTGCTCCCAAGGATGTAGAGATCAAAAAGCTGGGCA 480
DB 421 TCAGCTGGATGCAACCCCATTTGCTCCCAAGGATGTAGAGATCAAAAAGCTGGGCA 480
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DB 601 AGCCTACCCCTCCAGATGAGCTTCTACCTCAAGCTATCGAATTTGCAACAATATTACG 660
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DB 661 GCTTCCTTCAAGAGGCAAAATAGAGAAATCTGGCCAGGGTGAAGCGGTAAACAAG 720
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DB 841 TCGATGCCCGAGCTGTTCCACTGCGCGGGAATGTTGAACACATCTGCAGACAGTGC 900
OY 901 GTTACTCCACCAACATGGCAATCAGTGGGSCATCAACGCTTCCCGCAGCGGAGTG 960
DB 901 GTTACTCCACCAACATGGCAATCAGTGGGSCATCAACGCTTCCCGCAGCGGAGTG 960
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DB 1321 GTTACATGGGACAGAGATCGAGTCCGGACTTCTGTGACGTCACAGCCTCAACATCC 1380
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OY 1501 CCATCATGAGACCACTCGGCTGCAAGATCTTCAATGAAGTACATGCAAGATGATAC 1560
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 Db 3901 AGACAAATCTTAATATCCAGGCTGGCGAGTGGTGAAGATGAGACTTGGCTGAGT 3960
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 QY 4021 TGTACAGTATTTATGCTCTGTATTTAAACCAACCCAGTCTGCCATGGCC 4080
 Db 4021 TGTACAGTATTTATGCTCTGTATTTAAACCAACCCAGTCTGCCATGGCC 4080
 QY 4081 ACTTGGCTCTCTGTATGATTCCTGTATGAGATTTATTCATGATTTGATTTACTT 4140
 Db 4081 ACTTGGCTCTCTGTATGATTCCTGTATGAGATTTATTCATGATTTGATTTACTT 4140
 QY 4141 TTAATC 4145
 Db 4141 TTAATC 4145

RESULT 2

AAF20940
 ID AAF20940 standard; DNA; 4145 BP.

AAF20940;

14-MAR-2001 (first entry)

Human inducible nitric oxide synthase polynucleotide fragment #2507.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 human; airway disorder; bronchoconstriction; lung inflammation;
 surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 immunosuppressive; antiallergic; analgesic; hypotensive; cytostatic;
 respiratory obstruction; pulmonary obstruction; impeded respiration;
 surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 cancer; ss.

OS Homo sapiens.

XX WO200062736-A2.

XX 26-OCT-2000.

XX 24-MAR-2000; 2000WO-US08020.

XX 06-APR-1999; 99US-0127958.

XX (UYEC-) UNIV EAST CAROLINA.

XX (NYCE/) NYCE J W.

XX NYCE JW;

XX WPI; 2000-679539/66.

Low adenosine (A) content antisense oligonucleotides which do not
 trigger adenosine receptors during metabolism, useful e.g. for treating
 cancers and respiratory obstructions.
 Disclosure; Page 254-255; 1592pp; English.

The present invention describes low adenosine (A) content antisense
 oligonucleotides and compositions (I) comprising them. In the antisense
 oligonucleotides the A is replaced by a 'Universal' or alternative base.
 (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 immunosuppressive, antiallergic, hypotensive and cytostatic activities.
 The antisense oligonucleotides and (I) can be used to down-regulate the

expression and/or activity of target polypeptides associated with
 lung/respiratory disorders and malignancies, such as stimulating and
 activating peptide factors and transmitters, transcription factors,
 immunoglobulins and antibodies, antibody receptors, cytokines and
 chemokines, endogenously produced specific and non-specific enzymes,
 binding proteins, adhesion molecules and their receptors, cytokine and
 chemokine receptors, adenosine receptors, bradykinin receptors, central
 nervous system (CNS) and peripheral nervous and non-nervous system
 receptors, CNS and peripheral nervous and non-nervous system peptide
 transmitters, defensins, growth factors, vasodilative peptides and
 receptors, binding proteins and malignancy associated proteins. The
 antisense oligonucleotides may be used in this way to treat disorders
 including respiratory obstruction (especially pulmonary obstruction
 and/or surfactant hypoproduction) and/or lung inflammation, allergy(ies)
 condition selected from pulmonary vasoconstriction, inflammation,
 allergies, asthma, impeded respiration, respiratory distress syndrome
 (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 pulmonary transplantation rejection, pulmonary infections, bronchitis,
 and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 fragments and antisense oligonucleotides used in the exemplification of
 the present invention.

Sequence 4145 BP; 968 A; 1203 C; 1126 G; 848 T; 0 other;

Query Match 100.0%; Score 4145; DB 21; Length 4145;

Best local Similarity 100.0%; Pred. No. 0;

Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTGCTTTAAATCTCTGCGCACCTTTGATGAGGGAGTGGCAGTTCTAGACAGTCCG 60
 Db 1 CTGCTTTAAATCTCTGCGCACCTTTGATGAGGGAGTGGCAGTTCTAGACAGTCCG 60
 QY 61 AATTTCTCAAGGACAGGCTCTCTCTGTTGACTGCTTACCTTACCCGGGAGGACAGTGC 120
 Db 61 AATTTCTCAAGGACAGGCTCTCTCTGTTGACTGCTTACCTTACCCGGGAGGACAGTGC 120
 QY 121 AGCAGCTGCAAGCCCGCACAGTGAAGACATCTGAGCTCAATTCAGATATGACATTA 180
 Db 121 AGCAGCTGCAAGCCCGCACAGTGAAGACATCTGAGCTCAATTCAGATATGACATTA 180
 QY 181 GTGACCTGCTTTGTAAGCCATAGAGAGTGGCTGTCTTGGAAATTTCTGTTCAGACCA 240
 Db 181 GTGACCTGCTTTGTAAGCCATAGAGAGTGGCTGTCTTGGAAATTTCTGTTCAGACCA 240
 QY 241 AATTCACCAAGATGCAATGAAATGGGGAAGACATCAACAACATGTGGAGAAAGCC 300
 Db 241 AATTCACCAAGATGCAATGAAATGGGGAAGACATCAACAACATGTGGAGAAAGCC 300
 QY 301 CCTGTGCCACCTCCAGTCCAGTACAGAGATGATGATTCAGATCAACCTCAGCAAGC 360
 Db 301 CCTGTGCCACCTCCAGTCCAGTACAGAGATGATGATTCAGATCAACCTCAGCAAGC 360
 QY 361 AGCAGATAGTCCCGCAGCCCTGTGTGAGAGCGGGAAGAAAGTCTCAGAAATCTGG 420
 Db 361 AGCAGATAGTCCCGCAGCCCTGTGTGAGAGCGGGAAGAAAGTCTCAGAAATCTGG 420
 QY 421 TCAAGCTGATGCAACCCCATTTGCTCCCGCACGGCATGTGAGATTCAAAAAATGGGGCA 480
 Db 421 TCAAGCTGATGCAACCCCATTTGCTCCCGCACGGCATGTGAGATTCAAAAAATGGGGCA 480
 QY 481 GCGGGATGACTTCCCAAGACACTTCAACATTAAGGCCAAGAGATTTTAATCTGCAAGT 540
 Db 481 GCGGGATGACTTCCCAAGACACTTCAACATTAAGGCCAAGAGATTTTAATCTGCAAGT 540
 QY 541 CCAATCTTGCTGGGGTTCATTTAGCTCCCAAAAGTTTGAACAGAGAGCCAGGAGCA 600
 Db 541 CCAATCTTGCTGGGGTTCATTTAGCTCCCAAAAGTTTGAACAGAGAGCCAGGAGCA 600
 QY 601 ACCCTACCCCTCCAGATGAGCTTACCTCAAGCTATGCAATTTGTTCACCAATATTACG 660
 Db 601 ACCCTACCCCTCCAGATGAGCTTACCTCAAGCTATGCAATTTGTTCACCAATATTACG 660

QY 661 GCTCCTTCAAGAGCGCAAAATAGAGAACATCTGCGCCAGGCTGTAACCGCTAACAAAG 720
 Db 661 GCTCCTTCAAGAGCGCAAAATAGAGAACATCTGCGCCAGGCTGTAACCGCTAACAAAG 720
 QY 721 AGATGAAGAACACAGAGAACTTACAGTACAGGAGATGAGCTATCTTCCGACCAAGC 780
 Db 721 AGATGAAGAACACAGAGAACTTACAGTACAGGAGATGAGCTATCTTCCGACCAAGC 780
 QY 781 AGGCTTGGGCGCAATGCCCGACGCTGCATTTGGAGGATCCAGTGTCCAACTGCAAGTCT 840
 Db 781 AGGCTTGGGCGCAATGCCCGACGCTGCATTTGGAGGATCCAGTGTCCAACTGCAAGTCT 840
 QY 841 TCGATGCCCCGACAGCTGTTCCATGCCCCGGGAAATGTTTGAACACATCTGCAACAGCTGC 900
 Db 841 TCGATGCCCCGACAGCTGTTCCATGCCCCGGGAAATGTTTGAACACATCTGCAACAGCTGC 900
 QY 901 GTTACTCCACAAACATGAGCAATGAGTGGGCAATCCGCTGTCTCCCGACGCGAGTG 960
 Db 901 GTTACTCCACAAACATGAGCAATGAGTGGGCAATCCGCTGTCTCCCGACGCGAGTG 960
 QY 961 ATGGCAAGCAGCACTTCCGGGTGTGGAATGCTCAGCTATCCGCTATGCTGCTACAGA 1020
 Db 961 ATGGCAAGCAGCACTTCCGGGTGTGGAATGCTCAGCTATCCGCTATGCTGCTACAGA 1020
 QY 1021 TGGCAATGAGCAATCAGAGGAGGACCTGCGCAAGCTGGAATTCAGTCTGAGTATG 1080
 Db 1021 TGGCAATGAGCAATCAGAGGAGGACCTGCGCAAGCTGGAATTCAGTCTGAGTATG 1080
 QY 1081 ACCTGGGCTGGAAGCGCAAGTACGGCGCTGAGTGGTCCCGCTGCTCTGACAGGCA 1140
 Db 1081 ACCTGGGCTGGAAGCGCAAGTACGGCGCTGAGTGGTCCCGCTGCTCTGACAGGCA 1140
 QY 1141 ATGGCGGTGACCTGAGCTTTGGAATCCACCTGACCTTGTGCTTGAAGTGGCCATG 1200
 Db 1141 ATGGCGGTGACCTGAGCTTTGGAATCCACCTGACCTTGTGCTTGAAGTGGCCATG 1200
 QY 1201 AACATCCAAATAGAGTGGTTCGGGAACTGAGCTAAAGTGGTACGGCTGCTGCAAG 1260
 Db 1201 AACATCCAAATAGAGTGGTTCGGGAACTGAGCTAAAGTGGTACGGCTGCTGCAAG 1260
 QY 1261 TGGCAACATGCTGTTGAGTGGGCGGCTGGAAGTCCAGGAGTCCCGCTTCAATGAGCT 1320
 Db 1261 TGGCAACATGCTGTTGAGTGGGCGGCTGGAAGTCCAGGAGTCCCGCTTCAATGAGCT 1320
 QY 1321 GGTACATGAGGACAGAGATGAGATCCGGGACTTCTGTGACGTCCAGCGCTACACATCC 1380
 Db 1321 GGTACATGAGGACAGAGATGAGATCCGGGACTTCTGTGACGTCCAGCGCTACACATCC 1380
 QY 1381 TGGAGAAAGTGGGAGAGAGATGGGCTGGAAGACGACAGCTGGGCTGCTGGAAG 1440
 Db 1381 TGGAGAAAGTGGGAGAGAGATGGGCTGGAAGACGACAGCTGGGCTGCTGGAAG 1440
 QY 1441 ACCAGGCTGTGTTGAGATCAACATTTGCTGTATCATAGTTTTCAGAGCAGAAATGTA 1500
 Db 1441 ACCAGGCTGTGTTGAGATCAACATTTGCTGTATCATAGTTTTCAGAGCAGAAATGTA 1500
 QY 1501 CCATCATGAGACACCACTGCGGCTGCAGAAATCTTCAATGAGTACATGAGTAATGTAATCC 1560
 Db 1501 CCATCATGAGACACCACTGCGGCTGCAGAAATCTTCAATGAGTACATGAGTAATGTAATCC 1560
 QY 1561 GGTCCGCTGGGGGCTGGCCCGGACAGACTGATTTGGGCTGCTCCCTCATGCTGGGAGCA 1620
 Db 1561 GGTCCGCTGGGGGCTGGCCCGGACAGACTGATTTGGGCTGCTCCCTCATGCTGGGAGCA 1620
 QY 1621 TCACCCCGCTGTTTCCACAGAGATGCTGAATCTAGTCTGCTCCCTTTTACTACTATC 1680
 Db 1621 TCACCCCGCTGTTTCCACAGAGATGCTGAATCTAGTCTGCTCCCTTTTACTACTATC 1680
 QY 1681 AGGTAGAGGCTTGGAAAAACCATGTTGGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740
 Db 1681 AGGTAGAGGCTTGGAAAAACCATGTTGGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740

QY 1741 AGATTCATTGAAAGCTTGTGTCAAAGCTGTGCTTTTGGCTGTATGTCATGCGCAGAA 1800
 Db 1741 AGATTCATTGAAAGCTTGTGTCAAAGCTGTGCTTTTGGCTGTATGTCATGCGCAGAA 1800
 QY 1801 CAATGGGCTCCGAGTCAAGTCAACATCTCTTTTGGACAGAGACAGAAAAATCAGAG 1860
 Db 1801 CAATGGGCTCCGAGTCAAGTCAACATCTCTTTTGGACAGAGACAGAAAAATCAGAG 1860
 QY 1861 CGCTGGGCTGGGAGCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTGTGCA 1920
 Db 1861 CGCTGGGCTGGGAGCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTGTGCA 1920
 QY 1921 TGGATTAATACAGGCTGAGCTGCTGGAAGAGAAAGGCTGTGTTGTGTGTCACAGTA 1980
 Db 1921 TGGATTAATACAGGCTGAGCTGCTGGAAGAGAAAGGCTGTGTTGTGTGTCACAGTA 1980
 QY 1981 CGTTTGGCAATGAGACTGCCCTGGCAATGAGAGAAATCGAATAATGCTCTTCATGC 2040
 Db 1981 CGTTTGGCAATGAGACTGCCCTGGCAATGAGAGAAATCGAATAATGCTCTTCATGC 2040
 QY 2041 TGAAGAGCTCAACACAAATTCAGTACGCTGTGTTGGCTTCGCTCCAGCATATAC 2100
 Db 2041 TGAAGAGCTCAACACAAATTCAGTACGCTGTGTTGGCTTCGCTCCAGCATATAC 2100
 QY 2101 CTGCGTCTGCGCTTTCCTCATGACATTTGATGAAAGCTGTCTCCACTGAGGCTCTC 2160
 Db 2101 CTGCGTCTGCGCTTTCCTCATGACATTTGATGAAAGCTGTCTCCACTGAGGCTCTC 2160
 QY 2161 AGCTACCCCGATGGAGAAAGGGATGAGCTCAATGGGCGAGAGAGAGGCTTCCGCGAGT 2220
 Db 2161 AGCTACCCCGATGGAGAAAGGGATGAGCTCAATGGGCGAGAGAGAGGCTTCCGCGAGT 2220
 QY 2221 GGGCGGTGCAAACTTCAAGGCAAGCTGTGAGAGCTTGTGATGTCGAGGCAACAGACA 2280
 Db 2221 GGGCGGTGCAAACTTCAAGGCAAGCTGTGAGAGCTTGTGATGTCGAGGCAACAGACA 2280
 QY 2281 TTGAGATCCCAAGCTCTACACCTTCAATGTCAGTGTGAGACCTGGGACCTGACATCCAGGCTCG 2340
 Db 2281 TTGAGATCCCAAGCTCTACACCTTCAATGTCAGTGTGAGACCTGGGACCTGACATCCAGGCTCG 2340
 QY 2341 TGCAGAGCTCAGAGCTTGTGAGCTCAGCAAAAGGCTTGAAGAGATGATGATGATGATGATG 2400
 Db 2341 TGCAGAGCTCAGAGCTTGTGAGCTCAGCAAAAGGCTTGAAGAGATGATGATGATGATGATG 2400
 QY 2401 TGTTCACATGAGGCTCAAAATCTCGGCAAAATCTCAAAAGTCCGACATCCAGCGTGCCA 2460
 Db 2401 TGTTCACATGAGGCTCAAAATCTCGGCAAAATCTCAAAAGTCCGACATCCAGCGTGCCA 2460
 QY 2461 CCATCCTGTGGAATCTTCTGTGAGATGGGCAAGGCTGAACTGAGTGGGCGGAGG 2520
 Db 2461 CCATCCTGTGGAATCTTCTGTGAGATGGGCAAGGCTGAACTGAGTGGGCGGAGG 2520
 QY 2521 ACCTTGGGGTTTGGCCAGCAACAGCGGCTGCTGTCAGAGCAATCTGAGAGCAATG 2580
 Db 2521 ACCTTGGGGTTTGGCCAGCAACAGCGGCTGCTGTCAGAGCAATCTGAGAGCAATG 2580
 QY 2581 TGGATGCCCCCAACCCACAGACAGTGGCTGAGAGACCTGATGAGTGGACACT 2640
 Db 2581 TGGATGCCCCCAACCCACAGACAGTGGCTGAGAGACCTGATGAGTGGACACT 2640
 QY 2641 ACTGGGTGAGTCAAGAGAGAGGCTGCCCCCTGCTGACTGACAGGAGGCTTCACTCTCC 2700
 Db 2641 ACTGGGTGAGTCAAGAGAGAGGCTGCCCCCTGCTGACTGACAGGAGGCTTCACTCTCC 2700
 QY 2701 CGGACATCACACACCCCAACCCAGCTGCTCTCCAAAAGCTGGCCAGAGTGGCCACAG 2760
 Db 2701 CGGACATCACACACCCCAACCCAGCTGCTCTCCAAAAGCTGGCCAGAGTGGCCACAG 2760
 QY 2761 AAGAGCTTGAAGACAGAGGCTGAGAGGCTTGTGACAGCTTCAAGATACAGTACAGTGTGA 2820
 Db 2761 AAGAGCTTGAAGACAGAGGCTGAGAGGCTTGTGACAGCTTCAAGATACAGTACAGTGTGA 2820
 QY 2821 AGTTTCAACCAAGCCCACTTCTGAGAGGTGTAGAGAGTTCCTGCTGCGGGTGT 2880

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Db 2821 AGTTCCACCAACGCCCCCAATTCCTGAGAGGTCTACAGAGATCCCGCTCCCTGCGGGTGT 2880
QY 2881 CTGCTGGCTTCTGCTTCCAGCTCCCATCTCTGAAAGCCAGGTTTACTACATCAGCT 2940
Db 2881 CTGCTGGCTTCTGCTTCCAGCTCCCATCTCTGAAAGCCAGGTTTACTACATCAGCT 2940
QY 2941 CTTCCCGGATATCACAGCCGACGAGATCCACCTGATGCGCTGCTACCTACACA 3000
Db 2941 CTTCCCGGATATCACAGCCGACGAGATCCACCTGATGCGCTGCTACCTACACA 3000
QY 3001 CCGAGATAGGAGGAGTCCCTGACACAGGTTCTGAGACATAGGCTCAACAGCTTGA 3060
Db 3001 CCGAGATAGGAGGAGTCCCTGACACAGGTTCTGAGACATAGGCTCAACAGCTTGA 3060
QY 3061 AGCCCAAGAGCCAGTCCCTGCTTGTGCGGAATGCCAGGCTTCCACCTCCCGAGG 3120
Db 3061 AGCCCAAGAGCCAGTCCCTGCTTGTGCGGAATGCCAGGCTTCCACCTCCCGAGG 3120
QY 3121 ATCCCTCCATCTGATCCATCCATCCGAGGCTGACAGGATGCTGCTTCCGAGTT 3180
Db 3121 ATCCCTCCATCTGATCCATCCGAGGCTGACAGGATGCTGCTTCCGAGTT 3180
QY 3181 TCTGGCAGCAAGCGCTCCATGATCCACAGCAAGGAGTCCGAGGAGCCGATGACT 3240
Db 3181 TCTGGCAGCAAGCGCTCCATGATCCACAGCAAGGAGTCCGAGGAGCCGATGACT 3240
QY 3241 TGGTGTGGGTGGCGCCGCGCCAGATGAGACACATCTACAGAGAGATGCTGAGA 3300
Db 3241 TGGTGTGGGTGGCGCCGCGCCAGATGAGACACATCTACAGAGAGATGCTGAGA 3300
QY 3301 TGGCCCAAGAGGAGTGTGCTGATCGGTCACACAGCTATTCGCGCTGCTGGCAGC 3360
Db 3301 TGGCCCAAGAGGAGTGTGCTGATCGGTCACACAGCTATTCGCGCTGCTGGCAGC 3360
QY 3361 CCAAGGCTATGTTACAGACATCTGCGGACAGCTGCGCAGGAGTCTCGTGTGC 3420
Db 3361 CCAAGGCTATGTTACAGACATCTGCGGACAGCTGCGCAGGAGTCTCGTGTGC 3420
QY 3421 TCCACAGAGAGCCAGGCGACCTGATGTTGCGGGATGTCGCGATGCGCGGAGCTG 3480
Db 3421 TCCACAGAGAGCCAGGCGACCTGATGTTGCGGGATGTCGCGATGCGCGGAGCTG 3480
QY 3481 CCCACACCTGAAAGCAGCTGCTGCTGCAAGCTGAATGAATGAGAGCAGTGGAGG 3540
Db 3481 CCCACACCTGAAAGCAGCTGCTGCTGCAAGCTGAATGAATGAGAGCAGTGGAGG 3540
QY 3541 ACTATTTCTTCAAGCTAAAGCAGAGCGCTATCAGCAAGATATCTGCTGTAT 3600
Db 3541 ACTATTTCTTCAAGCTAAAGCAGAGCGCTATCAGCAAGATATCTGCTGTAT 3600
QY 3601 TTCTTACGAGGCGAAGAGAGAGGCTGCGGTGCGAGCCGACAGCTGAGATGTGAG 3660
Db 3601 TTCTTACGAGGCGAAGAGAGAGGCTGCGGTGCGAGCCGACAGCTGAGATGTGAG 3660
QY 3661 CGCTCTGAGGCGCTACAGAGAGGCTTAAAGCTCCGCGCAGAACTTAAGATGAGGCA 3720
Db 3661 CGCTCTGAGGCGCTACAGAGAGGCTTAAAGCTCCGCGCAGAACTTAAGATGAGGCA 3720
QY 3721 GCTCTGATATCTGAGGCTACAGGCGCTGCGAGATGAGAGAAATGATATCCCGAGC 3780
Db 3721 GCTCTGATATCTGAGGCTACAGGCGCTGCGAGATGAGAGAAATGATATCCCGAGC 3780
QY 3781 CTGAAGTCTTATTTCTCAAGCTTCTCCCATCAAGCCCTTACTGACCTCAACAA 3840
Db 3781 CTGAAGTCTTATTTCTCAAGCTTCTCCCATCAAGCCCTTACTGACCTCAACAA 3840
QY 3841 GTTAGCACCCTGATGATGAGAGCTCTCTCTCAAACTGGGGCTCCCTGCTCCCTTGG 3900
Db 3841 GTTAGCACCCTGATGATGAGAGCTCTCTCTCAAACTGGGGCTCCCTGCTCCCTTGG 3900
QY 3901 AGCAAAATCTTAAATGCAAGGCTGCGAGTGGGTAAGATGGAATCTGCTGTAGT 3960
Db 3901 AGCAAAATCTTAAATGCAAGGCTGCGAGTGGGTAAGATGGAATCTGCTGTAGT 3960

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Db 3901 AGCAAAATCTTAAATGCAAGGCTGCGAGTGGGTAAGATGGAATCTGCTGTAGT 3960
QY 3961 GCACCACTTCAAGTACACACAGGAGGCTGTATGCAACCACTGTATTTACTGCTTG 4020
Db 3961 GCACCACTTCAAGTACACACAGGAGGCTGTATGCAACCACTGTATTTACTGCTTG 4020
QY 4021 TGTACAGTATTTATGCTGTATTTAAAAACATACACCCAGTCTGTTCCCAATGCC 4080
Db 4021 TGTACAGTATTTATGCTGTATTTAAAAACATACACCCAGTCTGTTCCCAATGCC 4080
QY 4081 ACTTGGCTTCTCCCTGATGATTCCTGATGAGATATTACATGATGATTTACTT 4140
Db 4081 ACTTGGCTTCTCCCTGATGATTCCTGATGAGATATTACATGATGATTTACTT 4140
QY 4141 TAAATC 4145
Db 4141 TAAATC 4145

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RESULT 3
 AAA34818
 ID AAA34818 standard; DNA: 4145 BP.
 XX
 AC AAA34818;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Human adenosine receptor related polynucleotide SEQ ID NO:2507.
 XX
 KW Human: adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; anti-inflammatory;
 KW antiallergic; antihistaminic; cytosolic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 KW
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US17712.
 XX
 PR 03-AUG-1998; 98US-0095212.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 PT New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers
 XX
 PS
 XX
 PS Disclosure: Page 664-665; 1343pp: English.
 XX
 CC The present invention describes a new composition comprising an
 CC antisense oligonucleotide (ON) with low adenosine (up to 15%), which
 CC targets nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have anti-inflammatory, antiallergic,
 CC antispasmodic, cytosolic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
 CC asthma, impaired respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
 CC

CC carcinomas, and cancers which may metastasize to the lungs, including
CC breast and prostate cancer. The reduction of the adenoviral content of
CC the ONS reduces side effects. The A-containing ONS break down with the
CC release of deoxyadenosine which activates adenoviral receptors causing the
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 185, and then the last
CC 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC differ from the previously named sequences. SEQ ID NO:11 to 1680
CC (AAA32323 to AAA33992) are specifically claimed ONS from the present
CC invention. N.B. Sequences given in the disclosure of the present
CC invention do not match up with their corresponding SEQ ID NO: sequences
CC given in the sequence listing.

XX Sequence 4145 BP; 968 A; 1203 C; 1126 G; 848 T; 0 other;

Query Match 100.0%; Score 4145; DB 21; Length 4145;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTGCTTTAAATCTCTGCGCCACCTTTGATGAGGGGACGTGCTTACAGAGTCCCG 60
DB 1 CTGCTTTAAATCTCTGCGCCACCTTTGATGAGGGGACGTGCTTACAGAGTCCCG 60
QY 61 AAGTTTCAAGGACAGAGTCTCTGCTTCTGCTTCTCTTACCCCGGGGAGGAGTGC 120
DB 61 AAGTTTCAAGGACAGAGTCTCTGCTTCTGCTTCTCTTACCCCGGGGAGGAGTGC 120
QY 121 AGCCAGTGGACAGCCCGCCAGTGAAGACATCTGAGCTCAATTCAGATTAAGTACATA 180
DB 121 AGCCAGTGGACAGCCCGCCAGTGAAGACATCTGAGCTCAATTCAGATTAAGTACATA 180
QY 181 GTGACCTGCTTTGTAAGCCATAGAGATGGCTCTCTTGAATTTCTTTCAAGGCA 240
DB 181 GTGACCTGCTTTGTAAGCCATAGAGATGGCTCTCTTGAATTTCTTTCAAGGCA 240
QY 241 AATTCACACAGTATGCAATGATGGGAAAAAGACATCAACACATGTGAGAAAGCC 300
DB 241 AATTCACACAGTATGCAATGATGGGAAAAAGACATCAACACATGTGAGAAAGCC 300
QY 301 CCGTGGCCACCTCCAGTCCAGTACACAGATGACCTTCACTGATACACCTCAGCAAGC 360
DB 301 CCGTGGCCACCTCCAGTCCAGTACACAGATGACCTTCACTGATACACCTCAGCAAGC 360
QY 361 AGCAGATGATGCGCCGAGCCCTGCGGAGAGGAGGAAAGATCTCCAGAACTCTGG 420
DB 361 AGCAGATGATGCGCCGAGCCCTGCGGAGAGGAGGAAAGATCTCCAGAACTCTGG 420
QY 421 TCAAGCTGATGCAACCCATTTCTCTCCCGACGCAATGTGAGATCAAAAATGCGGCA 480
DB 421 TCAAGCTGATGCAACCCATTTCTCTCCCGACGCAATGTGAGATCAAAAATGCGGCA 480
QY 481 GCGGATGATCTTCCAGACACACTTCCATTAAGGCAAGGATTTTAATCTTGAGGT 540
DB 481 GCGGATGATCTTCCAGACACACTTCCATTAAGGCAAGGATTTTAATCTTGAGGT 540
QY 541 CCAATCTTGGCTGGGGTCCATTAATGACTCCCAAAAGTTTACAGAGAGCCAGGACA 600
DB 541 CCAATCTTGGCTGGGGTCCATTAATGACTCCCAAAAGTTTACAGAGAGCCAGGACA 600
QY 601 AGCCTACCCCTCCAGATGAGTCTTCACTCAAGCTATGATGAATTTGTCAACCAATATTACG 660
DB 601 AGCCTACCCCTCCAGATGAGTCTTCACTCAAGCTATGATGAATTTGTCAACCAATATTACG 660
QY 661 GCTCTTTAAAGAGGCAAAATAGAGAAACATCTGGCCAGGAGTGAAGCGGTAAACAAG 720
DB 661 GCTCTTTAAAGAGGCAAAATAGAGAAACATCTGGCCAGGAGTGAAGCGGTAAACAAG 720
QY 721 AGATGAAACAAACAGAACTACCAACTGAGGAGATGAGCTATCTTCCACCAAGC 780
DB 721 AGATGAAACAAACAGAACTACCAACTGAGGAGATGAGCTATCTTCCACCAAGC 780
QY 781 AGGCTGGGCAATGCCCAAGCTGCTATTTGGAGATCCAGTGTTCACCACTGCAAGTCT 840

DB 781 AGGCTGGGCAATGCCCAAGCTGCTATTTGGAGATCCAGTGTTCACCACTGCAAGTCT 840
QY 841 TCGATGCCCGGAGCTGTTCCACTGCGCGGGAATGTTGAACACATGCGACAGCTGC 900
DB 841 TCGATGCCCGGAGCTGTTCCACTGCGCGGGAATGTTGAACACATGCGACAGCTGC 900
QY 901 GTTACTCCACCAACATGAGCAACATCAGTGGGCAATCAGCTGCTTCCCGAGGAGTGC 960
DB 901 GTTACTCCACCAACATGAGCAACATCAGTGGGCAATCAGCTGCTTCCCGAGGAGTGC 960
QY 961 ATGGCAACAGACTTCCGGGTGAGAAATGCTCAGCTCATCCGCTATGCTGCTACCA 1020
DB 961 ATGGCAACAGACTTCCGGGTGAGAAATGCTCAGCTCATCCGCTATGCTGCTACCA 1020
QY 1021 TGGCAGATGCGACATTCAGAGGGGACCTGCAACGTTGATTCATCAGCTGCTACAG 1080
DB 1021 TGGCAGATGCGACATTCAGAGGGGACCTGCAACGTTGATTCATCAGCTGCTACAG 1080
QY 1081 ACCCTGGCTGGAAGCCCAAGTACGCGCTTCGATGCTGCTGCTGCTGCAAGGCA 1140
DB 1081 ACCCTGGCTGGAAGCCCAAGTACGCGCTTCGATGCTGCTGCTGCTGCAAGGCA 1140
QY 1141 ATGCGCTGACCTGAGCTCTTCAAAATCCACTGACCTTGTGCTTGTAGTGGCATGG 1200
DB 1141 ATGCGCTGACCTGAGCTCTTCAAAATCCACTGACCTTGTGCTTGTAGTGGCATGG 1200
QY 1201 AACATCCCAATAGCAGAGTGTGCGGAACTGAGACCTAAAGGGTACGCTGCTGAG 1260
DB 1201 AACATCCCAATAGCAGAGTGTGCGGAACTGAGACCTAAAGGGTACGCTGCTGAG 1260
QY 1261 TGGCCAAATGCTGCTTGAAGTGGGCGCTGAGTCTCCAGAGTGCCTTCAATGCT 1320
DB 1261 TGGCCAAATGCTGCTTGAAGTGGGCGCTGAGTCTCCAGAGTGCCTTCAATGCT 1320
QY 1321 GGTACATGGGCAACAGATGCGAGTCCGGGACTTGTGAGCTCCAGGGCTTCAACATCC 1380
DB 1321 GGTACATGGGCAACAGATGCGAGTCCGGGACTTGTGAGCTCCAGGGCTTCAACATCC 1380
QY 1381 TGGAGAAATGGGCAAGAGATGGGCTTGAACACACAGTGGCTGCTTGAAG 1440
DB 1381 TGGAGAAATGGGCAAGAGATGGGCTTGAACACACAGTGGCTGCTTGAAG 1440
QY 1441 ACCAGCTGCTGTTGATCAACATTTCTGATCAATGATTTTCAAGGAGATGGA 1500
DB 1441 ACCAGCTGCTGTTGATCAACATTTCTGATCAATGATTTTCAAGGAGATGGA 1500
QY 1501 CCATCATGACACACACCTGCGCTGCGAATTCCTTATGAAATGCAAGATGAATCC 1560
DB 1501 CCATCATGACACACACCTGCGCTGCGAATTCCTTATGAAATGCAAGATGAATCC 1560
QY 1561 GGTCCGCTGGGGCTGCGCGGAGACTGATTTGGCTGCTCCCATGCTTGGAGCA 1620
DB 1561 GGTCCGCTGGGGCTGCGCGGAGACTGATTTGGCTGCTCCCATGCTTGGAGCA 1620
QY 1621 TCAACCCCGCTGTTTCAACAGAGATGCTGACTCTGCTGCTTCTACTATAC 1680
DB 1621 TCAACCCCGCTGTTTCAACAGAGATGCTGACTCTGCTGCTTCTACTATAC 1680
QY 1681 AGGTAGAGGCTTGAAGAACCATGCTGCGAGAGACAGAGGAGACCCAGAGAGAG 1740
DB 1681 AGGTAGAGGCTTGAAGAACCATGCTGCGAGAGACAGAGGAGACCCAGAGAGAG 1740
QY 1741 AGATTCATTAAGAAAGTCTGCTCAAGCTGCTCTTGTATGCTGATGCTGCA 1800
DB 1741 AGATTCATTAAGAAAGTCTGCTCAAGCTGCTCTTGTATGCTGATGCTGCA 1800
QY 1801 CAATGGCTCCGAGTACAGATCACTCTTTCGACAGAGATCAAGAAATTCAGAG 1860
DB 1801 CAATGGCTCCGAGTACAGATCACTCTTTCGACAGAGATCAAGAAATTCAGAG 1860
QY 1861 CCGTGGCTGGAGCTGGGGCTTATTCAGTGTGCTTCAACCCAGGTTGTCTGA 1920

Db	1861	CGCTGGCCTGGGACCTGGGGGCGCTTATTCAGCTGTGCTTCAACCCCAAGTTGTGTCA	1920
Qy	1921	TGGATAGTACAGGCTGAGCTGCTCGAGGAGGAACGGCTGCTGTTGGTGGTACAGTA	1980
Db	1921	TGGATAACTACAGGCTGAGCTGCTCGAGGAGGAACGGCTGCTGTTGGTGGTACAGTA	1980
Qy	1981	CGTTGGCAATGAGAGACTGGCCTGGCAATGAGAGAAACTAGAAATTCGCTTTTCATGC	2040
Db	1981	CGTTGGCAATGAGAGACTGGCCTGGCAATGAGAGAAACTAGAAATTCGCTTTTCATGC	2040
Qy	2041	TGAAAGAGCTCAACAACTAATTCAGGTACGCTGTGTTTGGGCTGGGCTCCAGCATGTACC	2100
Db	2041	TGAAAGAGCTCAACAACTAATTCAGGTACGCTGTGTTTGGGCTGGGCTCCAGCATGTACC	2100
Qy	2101	CTCGGTTCTGGGCTTTGGTCTCATGACATGTATTCAGAAAGCTTCCCACTGGGGGCTCTC	2160
Db	2101	CTCGGTTCTGGGCTTTGGTCTCATGACATGTATTCAGAAAGCTTCCCACTGGGGGCTCTC	2160
Qy	2161	AGCTCACCCCGATGGGAGAAAGGGGATAGCTCAGTGGGCGAGAGAGGCTTCCGACAGT	2220
Db	2161	AGCTCACCCCGATGGGAGAAAGGGGATAGCTCAGTGGGCGAGAGAGGCTTCCGACAGT	2220
Qy	2221	GGGCGCTGCAAACTTCAAGGCAAGCCTGTGAGAGCTTGTATGTCCGAGGCAACAGACA	2280
Db	2221	GGGCGCTGCAAACTTCAAGGCAAGCCTGTGAGAGCTTGTATGTCCGAGGCAACAGACA	2280
Qy	2281	TTTCAGATCCCAAGCTCTAGACCTCAATGTGACCTGGGAGCCGACACATACAGGCTCG	2340
Db	2281	TTTCAGATCCCAAGCTCTAGACCTCAATGTGACCTGGGAGCCGACACATACAGGCTCG	2340
Qy	2341	TGCAGAGCTACAGGCTTTGGAGCTTCAGCAAGCCCTCAGCAGCATATGCCAAGAGC	2400
Db	2341	TGCAGAGCTACAGGCTTTGGAGCTTCAGCAAGCCCTCAGCAGCATATGCCAAGAGAGC	2400
Qy	2401	TGTTCAACCATGAGGCTCAATCTCGGAGAGATCTACAAATCCGACATTCAGCGCGTCCCA	2460
Db	2401	TGTTCAACCATGAGGCTCAATCTCGGAGAGATCTACAAATCCGACATTCAGCGCGTCCCA	2460
Qy	2461	CCATCCGCTGGGAAACTCTCTGTGAGGATGGCCAAAGGCTTGAACCTCCGCGGGAGC	2520
Db	2461	CCATCCGCTGGGAAACTCTCTGTGAGGATGGCCAAAGGCTTGAACCTCCGCGGGAGC	2520
Qy	2521	ACCTTGGGGTTTCCCAAGGCAACGCGGCGCTGTGTCAAAGCATCTTGGAGCGATGG	2580
Db	2521	ACCTTGGGGTTTCCCAAGGCAACGCGGCGCTGTGTCAAAGCATCTTGGAGCGATGG	2580
Qy	2581	TGGATGGCCCCACACCCCAACAGACAGTGGGCTTGAAGAGCTTGATGAGATGGGACGT	2640
Db	2581	TGGATGGCCCCACACCCCAACAGACAGTGGGCTTGAAGAGCTTGATGAGATGGGACGT	2640
Qy	2641	ACTGGGTCAGTACACAGAGGCTGCCCGCTGCTCACTACGCGCAGGCGCTCACTACTGCC	2700
Db	2641	ACTGGGTCAGTACACAGAGGCTGCCCGCTGCTCACTACGCGCAGGCGCTCACTACTGCC	2700
Qy	2701	CGGACATCAACACCCCAACCCCAAGCTGCTGCTCCAAAAGTGGCCAGGTGGCCACAG	2760
Db	2701	CGGACATCAACACCCCAACCCCAAGCTGCTGCTCCAAAAGTGGCCAGGTGGCCACAG	2760
Qy	2761	AAGAGCTTGAAGAGACAGAGGCTGGAGGCGCTGTGGCCAGCCCTCAGAGTACAGCAAGTGA	2820
Db	2761	AAGAGCTTGAAGAGACAGAGGCTGGAGGCGCTGTGGCCAGCCCTCAGAGTACAGCAAGTGA	2820
Qy	2821	AGTTCAACCAACAGCCCAATTCCTGTGAGAGGTATCCCGTCCCGCGGTCT	2880
Db	2821	AGTTCAACCAACAGCCCAATTCCTGTGAGAGGTATCCCGTCCCGCGGTCT	2880
Qy	2881	CTGCTGGCTCTGCTTTCCAGCTCCCATTCCTGAAGCCAGGTTCTTACTCCATCAGCT	2940
Db	2881	CTGCTGGCTCTGCTTTCCAGCTCCCATTCCTGAAGCCAGGTTCTTACTCCATCAGCT	2940
Qy	2941	CTTCCCGGATACAGGCGCCACAGGAGATCCACTGACTGTGGCGGTGGTCACTACACACA	3000
Db	2941	CTTCCCGGATACAGGCGCCACAGGAGATCCACTGACTGTGGCGGTGGTCACTACACACA	3000

Query Match	100.0%	Score 4145	DB 22	Length 4145
Best Local Similarity	100.0%	Pred No. 0		
Mismatches	0	Mismatches	0	Indels
Gaps	0	Gaps	0	

Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY	1	CTGCTTTAAATTCCTCGGCCACCTTTTATATAGGGGACTGGCAGTCTTGAACAGTCCG	60
Db	1	CTGCTTTAAATTCCTCGGCCACCTTTTATAGGGGACTGGCAGTCTTGAACAGTCCG	60
QY	61	AAGTTCACAGGCACAGCTCTCTTCCTGTTGACTGTCTTACCCCGGGAGGCAGTGC	120
Db	61	AAGTTCACAGGCACAGCTCTCTTCCTGTTGACTGTCTTACCCCGGGAGGCAGTGC	120
QY	121	AGCCAGCTGTAAGCCCCCACAAGTAAGAAACATCTGAGCTCAATTCACATTAAGTACATA	180
Db	121	AGCCAGCTGTAAGCCCCCACAAGTAAGAAACATCTGAGCTCAATTCACATTAAGTACATA	180
QY	181	GTGACCTGCTTTTAAAGCCATAGAGATGGCCTGTCTTGGAAATTTCTTTCAAGACCA	240
Db	181	GTGACCTGCTTTTAAAGCCATAGAGATGGCCTGTCTTGGAAATTTCTTTCAAGACCA	240
QY	241	AATTCCACAGTATGCAATGTAATGGGGAAAAAGACATCACACATATGTGGAGAAAGCC	300
Db	241	AATTCCACAGTATGCAATGTAATGGGGAAAAAGACATCACACATATGTGGAGAAAGCC	300
QY	301	CGTGTGCACCTCAGTCCAGTCCAGAGCAGACAGTACCTTCAGTATCACACCTCAGCAGC	360
Db	301	CGTGTGCACCTCAGTCCAGTCCAGAGCAGACAGTACCTTCAGTATCACACCTCAGCAGC	360
QY	361	AGCAGATGAGTCCCGCAGCCCCCTGTGGAGACGGGAAAGATCTTCAGAAATCTCTGG	420
Db	361	AGCAGATGAGTCCCGCAGCCCCCTGTGGAGACGGGAAAGATCTTCAGAAATCTCTGG	420
QY	421	TCAAGCTGATGACACCCCATTTGTCTCTCCGCCAGGCCATGTAGAGATCAAAAACCTGGGCA	480
Db	421	TCAAGCTGATGACACCCCATTTGTCTCTCCGCCAGGCCATGTAGAGATCAAAAACCTGGGCA	480
QY	481	CGGGATGACTTTCCAAAGACACACTTCACCATTAAGGCCAAAGGGATTTTAACTTGCAGT	540
Db	481	CGGGATGACTTTCCAAAGACACACTTCACCATTAAGGCCAAAGGGATTTTAACTTGCAGT	540
QY	541	CCAAATCTTGGCTTGGGGTCCATTTATACCTCCCAAAAGTTTGACCAAGAGNCCAGGGACA	600
Db	541	CCAAATCTTGGCTTGGGGTCCATTTATACCTCCCAAAAGTTTGACCAAGAGNCCAGGGACA	600
QY	601	AGCCACCCCCCGATGAGACTCTCTACCTCAGACTATCGAATTTGTCAACCAATATTACG	660
Db	601	AGCCACCCCCCGATGAGACTCTCTACCTCAGACTATCGAATTTGTCAACCAATATTACG	660
QY	661	GCTCCTTCAAGAGGCAAAATATAGAGAAACATCTGGCCAGGGTGGAGCCGGTAAACAAAG	720
Db	661	GCTCCTTCAAGAGGCAAAATATAGAGAAACATCTGGCCAGGGTGGAGCCGGTAAACAAAG	720
QY	721	AGATGAACCAACAGGAACCTACCAACTGACGGGAATAGTCACTTCCTGCCACCAAGC	780
Db	721	AGATGAACCAACAGGAACCTACCAACTGACGGGAATAGTCACTTCCTGCCACCAAGC	780
QY	781	AGGCCCTGGCGCAATGCCCAAGCTGCAATTGGAGAGATCCAGTGTGTCAACCTGCAGGTCT	840
Db	781	AGGCCCTGGCGCAATGCCCAAGCTGCAATTGGAGAGATCCAGTGTGTCAACCTGCAGGTCT	840
QY	841	TGCAATGCCCGCAGTGTTCACACTGCCCGGGAATGTTTAAACACTGTGCACACAGTGC	900
Db	841	TGCAATGCCCGCAGTGTTCACACTGCCCGGGAATGTTTAAACACTGTGCACACAGTGC	900
QY	901	GTTACTTCCACCAACATATGCAACATGCAAGTCTGGCCATCCACCTGTTCCTCCCAAGCGAGTG	960
Db	901	GTTACTTCCACCAACATATGCAACATGCAAGTCTGGCCATCCACCTGTTCCTCCCAAGCGAGTG	960
QY	961	ATGGCAGACGACTTCGGGTGTGGAATGCTAGCTCATCCGCTATGCTGGCTAACAGA	1020
Db	961	ATGGCAGACGACTTCGGGTGTGGAATGCTAGCTCATCCGCTATGCTGGCTAACAGA	1020
QY	1021	TGGCAGATGAGCAATCAGAGAGGAGCCCTGCCAAGCTGGAATTCACACTAGCTGTGCATCG	1080
Db	1021	TGGCAGATGAGCAATCAGAGAGGAGCCCTGCCAAGCTGGAATTCACACTAGCTGTGCATCG	1080

QY	1081	ACCTGGGCGGAAAGCCCAAGTACAGGCGCGTTCGATGTGTGTCCTCCCTGCTCTGCAAGGCCA	1140
Db	1081	ACCTGGGCGGAAAGCCCAAGTACAGGCGCGTTCGATGTGTGTCCTCCCTGCTCTGCAAGGCCA	1140
QY	1141	ATGGCCGTGACCCCTTGTGAAATCCACCTGACCTTGTGCTTGAAGGTGGCCATGG	1200
Db	1141	ATGGCCGTGACCCCTTGTGAAATCCACCTGACCTTGTGCTTGAAGGTGGCCATGG	1200
QY	1201	AACATCCCAATACGATGTGTTTCGGGAATCTGAGACTAAAGTGTATGCGCCCTGCTGAG	1260
Db	1201	AACATCCCAATACGATGTGTTTCGGGAATCTGAGACTAAAGTGTATGCGCCCTGCTGAG	1260
QY	1261	TGGCCAAATCTGCTTGAAGTGGGCGGCTGAGATTCGCCAGGGGGCCCTTCATAGGCT	1320
Db	1261	TGGCCAAATCTGCTTGAAGTGGGCGGCTGAGATTCGCCAGGGGGCCCTTCATAGGCT	1320
QY	1321	GGTACATGGGCGACAGATGTGAGTCCGGGACTTCTGTGAGCTCAGCGCTACAAATCC	1380
Db	1321	GGTACATGGGCGACAGATGTGAGTCCGGGACTTCTGTGAGCTCAGCGCTACAAATCC	1380
QY	1381	TGGAGGAATGGGAGGAGATGGGCGCTGGAAACGACACAGCTGCGCTGGAAG	1440
Db	1381	TGGAGGAATGGGAGGAGATGGGCGCTGGAAACGACACAGCTGCGCTGGAAG	1440
QY	1441	ACCAAGCTGTCTGTGATCAACATGTGTCATAGTTCATAGTTTCAGAGAGAGATGTA	1500
Db	1441	ACCAAGCTGTCTGTGATCAACATGTGTCATAGTTCATAGTTCAGAGAGAGATGTA	1500
QY	1501	CCATCATGAGACCAACACCTGCGCTGCAGAAATCCCTCATGAAATACATGCAATATATCC	1560
Db	1501	CCATCATGAGACCAACACCTGCGCTGCAGAAATCCCTCATGAAATACATGCAATATATCC	1560
QY	1561	GGTCCGCTGGGGCGTGGCCGGCAGACAGTATTTGGCTGTCCCTCCATGTCTGGAGCA	1620
Db	1561	GGTCCGCTGGGGCGTGGCCGGCAGACAGTATTTGGCTGTCCCTCCATGTCTGGAGCA	1620
QY	1621	TCAACCCCGCTGTTCACACAGAGATGCTGAACACTACGTCTGCTCCCTTCTACTATATC	1680
Db	1621	TCAACCCCGCTGTTCACACAGAGATGCTGAACACTACGTCTGCTCCCTTCTACTATATC	1680
QY	1681	AGGTAGAGCGCTGGAAACCCTATGTCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	1740
Db	1681	AGGTAGAGCGCTGGAAACCCTATGTCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	1740
QY	1741	AGATTCATTTGAAGTCTGTGTCAGAGCTGTGCTCTTGTGCTGTATGTGATCGCAAGA	1800
Db	1741	AGATTCATTTGAAGTCTGTGTCAGAGCTGTGCTCTTGTGCTGTATGTGATCGCAAGA	1800
QY	1801	CAATGCGTCCGAGTCAAGAGTCAACATCTCTTTCGAGAGAGAGAGAGAGAGAGAGAG	1860
Db	1801	CAATGCGTCCGAGTCAAGAGTCAACATCTCTTTCGAGAGAGAGAGAGAGAGAGAGAG	1860
QY	1861	CGCTGGCGCTGGGAGCTGGGGGCGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA	1920
Db	1861	CGCTGGCGCTGGGAGCTGGGGGCGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA	1920
QY	1921	TGGATTAAGTACAGGCTGACCTGCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	1980
Db	1921	TGGATTAAGTACAGGCTGACCTGCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	1980
QY	1981	CGTTTGGCAATGAGAGTCCCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	2040
Db	1981	CGTTTGGCAATGAGAGTCCCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	2040
QY	2041	TGAAAGAGCTCAACAACAATTCAGGTACGCTGTGGCTCGGCTCCAGCATGTATCC	2100
Db	2041	TGAAAGAGCTCAACAACAATTCAGGTACGCTGTGGCTCGGCTCCAGCATGTATCC	2100
QY	2101	CTCGGTTTGGGCGCTTGTGTCATGATTTGATCAGAGAGTGTCCCACTGGGGCGCTTTC	2160
Db	2101	CTCGGTTTGTGGCGCTTGTGTCATGATTTGATCAGAGAGTGTCCCACTGGGGCGCTTTC	2160
QY	2161	AGCTCACCCGATGGGAG	2220
Db	2161	AGCTCACCCGATGGGAG	2220
QY	2221	GGGCGCTGCAAACTTCAAGCGAGCTGTGAGAGCTTTGATGTGCTGGAGCAACAGACA	2280
Db	2221	GGGCGCTGCAAACTTCAAGCGAGCTGTGAGAGCTTTGATGTGCTGGAGCAACAGACA	2280
QY	2281	TTGAGATCCCAAGCTGTACACCTCCATGTGACTGGGACCCGACCACTTACAGAGCTCG	2340
Db	2281	TTGAGATCCCAAGCTGTACACCTCCATGTGACTGGGACCCGACCACTTACAGAGCTCG	2340
QY	2341	TGAGAGCTACAGCCTTTGGAGCTTCAGCAAGCCCTCAGCAGCATGATGCTCAAGAGC	2400
Db	2341	TGAGAGCTACAGCCTTTGGAGCTTCAGCAAGCCCTCAGCAGCATGATGCTCAAGAGC	2400
QY	2401	TGTTCCACATGAGGCTCAAAATCTGGCAGATTTTCAAAAGTCCGACATCCAGCCGTGCA	2460
Db	2401	TGTTCCACATGAGGCTCAAAATCTGGCAGATTTTCAAAAGTCCGACATCCAGCCGTGCA	2460
QY	2461	CCATCTGTGTGAGACTCTCTGTGAGATGGCCAAAGCGCTGAATCTAGCTGGGGGAGC	2520
Db	2461	CCATCTGTGTGAGACTCTCTGTGAGATGGCCAAAGCGCTGAATCTAGCTGGGGGAGC	2520
QY	2521	ACCTTGGGGTTTGGCCAGGCAACAGCGCGGCTGTGTCAAAGGCTGTGGAGAGATGG	2580
Db	2521	ACCTTGGGGTTTGGCCAGGCAACAGCGCGGCTGTGTCAAAGGCTGTGGAGAGATGG	2580
QY	2581	TGATGGCCCCACACCCACACAGACAGTGGCGCTGGAGAGCTGTGATGAGATGGAGCT	2640
Db	2581	TGATGGCCCCACACCCACACAGACAGTGGCGCTGGAGAGCTGTGATGAGATGGAGCT	2640
QY	2641	ACTGGGTCACTGACAAAGAGCTGCCCCCGTCACTACAGCCAGCCCTACTACTGCC	2700
Db	2641	ACTGGGTCACTGACAAAGAGCTGCCCCCGTCACTACAGCCAGCCCTACTACTGCC	2700
QY	2701	CGGACATCACACACCCCAACCCAGCTGTCTCCAAAAGCTGGGCCAGGTGGCCACAG	2760
Db	2701	CGGACATCACACACCCCAACCCAGCTGTCTCCAAAAGCTGGGCCAGGTGGCCACAG	2760
QY	2761	AAGAGCTGAGAGACAGAGGCTGGAGGCGCTGTGTCAGAGCCCTCAGAGTACAGCAATGGA	2820
Db	2761	AAGAGCTGAGAGACAGAGGCTGGAGGCGCTGTGTCAGAGCCCTCAGAGTACAGCAATGGA	2820
QY	2821	AGTTACCAACAGCCCCACATTCCTGAGAGTGTAGAGAGTCCCGCTCGCGGGTGT	2880
Db	2821	AGTTACCAACAGCCCCACATTCCTGAGAGTGTAGAGAGTCCCGCTCGCGGGTGT	2880
QY	2881	CTGCTGCTTCTGTCTTCCAGAGCTCCCAATCTGAAAGCCAGGTTCTACTCATAGCT	2940
Db	2881	CTGCTGCTTCTGTCTTCCAGAGCTCCCAATCTGAAAGCCAGGTTCTACTCATAGCT	2940
QY	2941	CGTCCGGGATTCACACCGCCAGGAGATCACCTGACTGTGCGGTGTGCTACCTTACACA	3000
Db	2941	CGTCCGGGATTCACACCGCCAGGAGATCACCTGACTGTGCGGTGTGCTACCTTACACA	300

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Db 3241 TGGTGTGGGTGCGCCGCCAGATGAGGACCATCTACAGAGAGAGATGCTGAGAGA 3300
Qy 3301 TGGCCAGAGAGGGGGTGGTGCATGCGGTGCACACAGACCTATTCGGCTGGCTGGACAGC 3360
Db 3301 TGGCCAGAGAGGGGGTGGTGCATGCGGTGCACACAGACCTATTCGGCTGGCTGGACAGC 3360
Qy 3361 CCAGAGCTATGTTGAGAGACATCTGCGGACAGCTGGCCAGCGAGGTGCTCCGTGTGC 3420
Db 3361 CCAGAGCTATGTTGAGAGACATCTGCGGACAGCTGGCCAGCGAGGTGCTCCGTGTGC 3420
Qy 3421 TCCACAGAGAGCGCCAGCCCTCTATGTTTGGGGGATGTGGCATGGCCCGGAGACGTGG 3480
Db 3421 TCCACAGAGAGCGCCAGCCCTCTATGTTTGGGGGATGTGGCATGGCCCGGAGACGTGG 3480
Qy 3481 CCCAGACCTGAGAGAGCTGTGTGGTCCCAAGCTGAATTTGATGAGAGAGAGCTGAGG 3540
Db 3481 CCCAGACCTGAGAGAGCTGTGTGGTCCCAAGCTGAATTTGATGAGAGAGAGCTGAGG 3540
Qy 3541 ACTATTTCTTTTACGCTCAAGAGCCAGAAAGCGCTATCAGGAAGATATCTTGGTGTGTAT 3600
Db 3541 ACTATTTCTTTTACGCTCAAGAGCCAGAAAGCGCTATCAGGAAGATATCTTGGTGTGTAT 3600
Qy 3601 TTTCTTACGAGGCGAAGAGAGAGAGGTGGGCTGACGCCAGCAGCCCTGAGAGATGTAG 3660
Db 3601 TTTCTTACGAGGCGAAGAGAGAGAGGTGGGCTGACGCCAGCAGCCCTGAGAGATGTAG 3660
Qy 3661 CGCTCTGAGGCGCTACAGAGAGGGTTAAAGCTCCGCGCACAGAACTTAAGATGAGAGCA 3720
Db 3661 CGCTCTGAGGCGCTACAGAGAGGGTTAAAGCTCCGCGCACAGAACTTAAGATGAGAGCA 3720
Qy 3721 GCTGTGATTTCTGAGGTACAGAGGGCTGGGAGATGAGAGAAAGTATATCCCGACG 3780
Db 3721 GCTGTGATTTCTGAGGTACAGAGGGCTGGGAGATGAGAGAAAGTATATCCCGACG 3780
Qy 3781 CTCAGTCTTATTTCTTCTCAAGCTTCCCTCCCATCAAGCCCTTACTGACCTCTAAACAA 3840
Db 3781 CTCAGTCTTATTTCTTCTCAAGCTTCCCTCCCATCAAGCCCTTACTGACCTCTAAACAA 3840
Qy 3841 GTAGACCCCTGATGATGAGAGCTCTCTCTCAAACTGGGGCTCCCTGGTCCCTTGG 3900
Db 3841 GTAGACCCCTGATGATGAGAGCTCTCTCTCTCAAACTGGGGCTCCCTGGTCCCTTGG 3900
Qy 3901 AGACAAATCTTAATGCGAGGCTGCGGAGTGGGTGAAGATGAGACTTGGTGTGAGT 3960
Db 3901 AGACAAATCTTAATGCGAGGCTGCGGAGTGGGTGAAGATGAGACTTGGTGTGAGT 3960
Qy 3961 GCACCACTTCAAGTACACACAGAGAGTGTATGCGACACACTGTATATTTAACTGCTTG 4020
Db 3961 GCACCACTTCAAGTACACACAGAGAGTGTATGCGACACACTGTATATTTAACTGCTTG 4020
Qy 4021 TGTACAGTTATTTATGCTCTGTATTTAAAAAACTAACACCCAGTCTGTCCCATGGCC 4080
Db 4021 TGTACAGTTATTTATGCTCTGTATTTAAAAAACTAACACCCAGTCTGTCCCATGGCC 4080
Qy 4081 ACTTGGGCTTCCCTGATGATGATCTCTGATGAGATGATTTACATGATTTGATTTACTT 4140
Db 4081 ACTTGGGCTTCCCTGATGATGATCTCTGATGAGATGATTTACATGATTTGATTTACTT 4140
Qy 4141 TAAATC 4145
Db 4141 TAAATC 4145

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RESULT 5
AAH47966
ID AAH47966 standard; cDNA: 4145 BP.
XX
AC AAH47966;
XX
XX 02-OCT-2001 (first entry)
XX
DE Mouse inducible nitric oxide synthase encoding cDNA 1.
XX

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KW Antisense oligonucleotide; inducible nitric oxide synthase;
KW modulate expression; immunomodulator; antidiabetic; cardiovascular;
KW cardiatic; neuroprotective; vasotropic; ischemia; reperfusion injury;
KW 2'-O-methoxyethyl; phosphorothioate; mouse; ss.
XX
OS Mus sp.
XX
FH Key location/Qualifiers
FT CDS 207..3668
FT /*tag= a
FT /product= "Inducible nitric oxide synthase"
XX
PD 26-JUL-2001.
XX
PF 15-JAN-2001; 2001MO-US01381.
XX
PR 24-JAN-2000; 2000US-0490208.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Dean NM, Cowse LM,
XX
XX WPI; 2001-465340/50.
XX
DR P-PSDB; AAG64498.
XX
PT New antisense oligonucleotides for modulating the expression of
PT inducible nitric oxide synthase in cells or tissues, particularly
PT useful for treating e.g. immunological, cardiovascular or neurological
PT disorders, or ischemia
XX
PS Example 13; Page 98-103; 144pp; English.
XX
CC The invention relates to antisense compounds, especially
CC oligonucleotides, which are targeted to a nucleic acid encoding inducible
CC nitric oxide synthase and which specifically hybridize to and modulate
CC expression of inducible nitric oxide synthase. The antisense compounds
CC have immunomodulator, antidiabetic, cardiovascular, cardiatic,
CC neuroprotective, disorder and vasotropic activity. The antisense
CC oligonucleotides are useful for inhibiting the expression of inducible
CC nitric oxide synthase in cells or tissues. In particular, the antisense
CC oligonucleotides are useful for treating diseases or disorders associated
CC with inducible nitric oxide synthase, e.g. diabetes, immunological
CC disorder, cardiovascular disorder, neurological disorder or
CC ischemia/reperfusion injury. The antisense oligonucleotides are also
CC useful for research and diagnostics. The present sequence is that of
CC mouse inducible nitric oxide synthase (Genbank accession number M92649).
XX
SQ Sequence 4145 BP; 968 A; 1203 C; 1126 G; 848 T; 0 other;
XX
Query Match 100.0%; Score 4145; DB 22; Length 4145;
Best Local Similarity 100.0%; Pred No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CTGCTTTAAATCTCTCGGCCACCTTGATGAGGGGAGTGGAGTTCAGACAGTCCG 60
Db 1 CTGCTTTAAATCTCTCGGCCACCTTGATGAGGGGAGTGGAGTTCAGACAGTCCG 60
Qy 61 AAGTTCGAAGGACAGAGTCTTCTGTTTACTGTCTTACCTTACCCCGGGAGGAGTGC 120
Db 61 AAGTTCGAAGGACAGAGTCTTCTGTTTACTGTCTTACCTTACCCCGGGAGGAGTGC 120
Qy 121 AGCAGCTGCAAGGCCACAGTGAAGACATGAGCTCAATTCAGATTAAGGACATTA 180
Db 121 AGCAGCTGCAAGGCCACAGTGAAGACATGAGCTCAATTCAGATTAAGGACATTA 180
Qy 181 GTGACCTGCTTTGTAAGCCATAGAGATGCGCTGCTTGGAAATTTCTGTTCAAGACA 240
Db 181 GTGACCTGCTTTGTAAGCCATAGAGATGCGCTGCTTGGAAATTTCTGTTCAAGACA 240
Qy 241 AATTTCACCCAGTATGATGAGTGGGAAAGACATCAACAATGTTGAGAGAAAGCC 300
Db 241 AATTTCACCCAGTATGATGAGTGGGAAAGACATCAACAATGTTGAGAGAAAGCC 300

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Db 241 AATTCACCAGTATGCAATGAAATGGGGAAAAAGACATCAACACATGTGGAGAAAGCCC 300
Qy 301 CCTGTGCCACTCTCATGTCAGTACAGATGACCTTCAGTATACAACTCCAGCAAGC 360
Db 301 CCTGTGCCACTCTCATGTCAGTACAGATGACCTTCAGTATACAACTCCAGCAAGC 360
Qy 361 AGCAGAAATGAGTCCCGCAGAGCCCTCTGTGAGACGCGGAAAGAGTCTCCAGATCTCTG 420
Db 361 AGCAGAAATGAGTCCCGCAGAGCCCTCTGTGAGACGCGGAAAGAGTCTCCAGATCTCTG 420
Qy 421 TCAAGCTGATGATCAACCCCATTTGTCTCCACAGCATGTAGATCAAAAATCTGGGCA 480
Db 421 TCAAGCTGATGATCAACCCCATTTGTCTCCACAGCATGTAGATCAAAAATCTGGGCA 480
Qy 481 GCGGGATGACTTTCACAGACACTTTCACATTAAGGCCAAAGGGATTTTAATCTGGCAGT 540
Db 481 GCGGGATGACTTTCACAGACACTTTCACATTAAGGCCAAAGGGATTTTAATCTGGCAGT 540
Qy 541 CCAAAATCTTGGGCTTCATATGATCCCAAAAGTTTTCACAGAGAGCCAGGGACA 600
Db 541 CCAAAATCTTGGGCTTCATATGATCCCAAAAGTTTTCACAGAGAGCCAGGGACA 600
Qy 601 ACCCTACCCCTTCAGATGAGCTTCTACTCAAGCTATGCAATTTGTCAACCAATTTACG 660
Db 601 ACCCTACCCCTTCAGATGAGCTTCTACTCAAGCTATGCAATTTGTCAACCAATTTACG 660
Qy 661 GCTCCTTCAAGAGGCAAAATAGAGAAATCTGCGCAGGGTGGAGCGGTAAACAAAG 720
Db 661 GCTCCTTCAAGAGGCAAAATAGAGAAATCTGCGCAGGGTGGAGCGGTAAACAAAG 720
Qy 721 AGATGAAACAAACAGAGAACTACCAACTGAGGAGATGAGCTATCTTCCACCAAGC 780
Db 721 AGATGAAACAAACAGAGAACTACCAACTGAGGAGATGAGCTATCTTCCACCAAGC 780
Qy 781 AGGCTGGGCGCAATCCCGCAGCGTGCATTTGGAGAGATGCAATGTGCCAAGCTGAGCT 840
Db 781 AGGCTGGGCGCAATCCCGCAGCGTGCATTTGGAGAGATGCAATGTGCCAAGCTGAGCT 840
Qy 841 TCGATGCCCGCAGCTGTTCATCTGCTCCGCGGAAATGTGAAACATCTGCAGACAGCTGC 900
Db 841 TCGATGCCCGCAGCTGTTCATCTGCTCCGCGGAAATGTGAAACATCTGCAGACAGCTGC 900
Qy 901 GTTACTCCACCAATGAGCAATGAGTGGCCATACCGGTGTCTCCCGCAGCGGAGTG 960
Db 901 GTTACTCCACCAATGAGCAATGAGTGGCCATACCGGTGTCTCCCGCAGCGGAGTG 960
Qy 961 ATGGCAAGAGCACTTCGCGGGGTGGAGATGCTCAGCTCATCCGTATGTGGCTACAGA 1020
Db 961 ATGGCAAGAGCACTTCGCGGGGTGGAGATGCTCAGCTCATCCGTATGTGGCTACAGA 1020
Qy 1021 TGGCAGATGGCAGCAATCAGAGGAGACCTGCGCAAGTGAATTCAGTACGTGTCATGC 1080
Db 1021 TGGCAGATGGCAGCAATCAGAGGAGACCTGCGCAAGTGAATTCAGTACGTGTCATGC 1080
Qy 1081 ACCTGGGCTGGAAAGCCCAAGTACGCGCTTCGATGTGTCTCCCTGCTCGAGGCA 1140
Db 1081 ACCTGGGCTGGAAAGCCCAAGTACGCGCTTCGATGTGTCTCCCTGCTCGAGGCA 1140
Qy 1141 ATGGGCGTGAACCTTCGATGCTTCCAAATCCCACTGACCTGTGTGAGTGGCCATG 1200
Db 1141 ATGGGCGTGAACCTTCGATGCTTCCAAATCCCACTGACCTGTGTGAGTGGCCATG 1200
Qy 1201 AACATCCCAATAGAGTGTGTTGGGAACTGAGAGCTAAAGTGGTGGAGCCCTGGCTGGAG 1260
Db 1201 AACATCCCAATAGAGTGTGTTGGGAACTGAGAGCTAAAGTGGTGGAGCCCTGGCTGGAG 1260
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Db 1261 TGGCCACATGCTGCTTGAAGTGGGCGCTGAGAGTTCACAGGGTGGCCCTTCATGAGCT 1320
Qy 1321 GGTACATGGGCAAGAGATCGAGTTCGGGACTTGTGAGAGTCCAGCGTACCAACATCC 1380
Db 1321 GGTACATGGGCAAGAGATCGAGTTCGGGACTTGTGAGAGTCCAGCGTACCAACATCC 1380

Qy 1381 TGGAGAAATGGGCGAGAGAAATGGGCTGGAAACGCAAGAGCTGGCTGCTGTGGAAG 1440
Db 1381 TGGAGAAATGGGCGAGAGAAATGGGCTGGAAACGCAAGAGCTGGCTGCTGTGGAAG 1440
Qy 1441 ACCAGGCTGTGTTGAGATCAACATTTGTTGATTCATAGTTTTCAGAGCAGAAATGTA 1500
Db 1441 ACCAGGCTGTGTTGAGATCAACATTTGTTGATTCATAGTTTTCAGAGCAGAAATGTA 1500
Qy 1501 CCATCATGAGCAACCACTGGGCTGCAAGATCTTTCATGAAGTACATGCAAGATGAATACC 1560
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Db 1561 GGTCCGCTGGGGCTGGCCGCGAGACGTTGTTGGTGGCCCTCCCATGTCTGGGAGCA 1620
Qy 1621 TCAACCCCGTGTTCACAGAGAGATGCTGAACATGCTCTGTCCTTCTACTACTATC 1680
Db 1621 TCAACCCCGTGTTCACAGAGAGATGCTGAACATGCTCTGTCCTTCTACTACTATC 1680
Qy 1681 AGGTAGAGGCTTGGAAACCCATGCTGTGGCAGAGACCAAGAGGAGAACCCCAAGAGAG 1740
Db 1681 AGGTAGAGGCTTGGAAACCCATGCTGTGGCAGAGACCAAGAGGAGAACCCCAAGAGAG 1740
Qy 1741 AGATTCATGAAAGTCTTGGTCAAAAGCTGTCTTTCGCTGTATGTGATGCGCAAGA 1800
Db 1741 AGATTCATGAAAGTCTTGGTCAAAAGCTGTCTTTCGCTGTATGTGATGCGCAAGA 1800
Qy 1801 CAATGGGCTCCGAGTCAAGAGTCAACATCTCTTTCGAGAGAGCAAGAAATCAGAGG 1860
Db 1801 CAATGGGCTCCGAGTCAAGAGTCAACATCTCTTTCGAGAGAGCAAGAAATCAGAGG 1860
Qy 1861 CGCTGGCTGGGAGCTGGGGGCTTATGACGTGTCGCTTCAACCCCAAGTGTCTGCA 1920
Db 1861 CGCTGGCTGGGAGCTGGGGGCTTATGACGTGTCGCTTCAACCCCAAGTGTCTGCA 1920
Qy 1921 TGGTAAGTACAGCTGAGCTGCTGAGAGAGAAAGGCTGTCTGTTGTGTGACAGTA 1980
Db 1921 TGGTAAGTACAGCTGAGCTGCTGAGAGAGAAAGGCTGTCTGTTGTGTGACAGTA 1980
Qy 1981 CGTTTGGCAATGGAAGTGCCTTGGCAATGAGAGAACTGAAAGAAATGCTCTTCATGC 2040
Db 1981 CGTTTGGCAATGGAAGTGCCTTGGCAATGAGAGAACTGAAAGAAATGCTCTTCATGC 2040
Qy 2041 TGAAGAGCTCAACCAAAATTCAGGTAGCGCTGTGTTGGCCCTGCGCATGATGTACC 2100
Db 2041 TGAAGAGCTCAACCAAAATTCAGGTAGCGCTGTGTTGGCCCTGCGCATGATGTACC 2100
Qy 2101 CTGCGTCTGCGCTTGTGCTCATGATGATGATGAGAGCTGTCCACCTGGGGGCTCTTC 2160
Db 2101 CTGCGTCTGCGCTTGTGCTCATGATGATGATGAGAGCTGTCCACCTGGGGGCTCTTC 2160
Qy 2161 AGCTCACCCGATGGAGAAAGGGAGTGAAGTCAAGTGGGAGAGAGCGCTTCCAGCT 2220
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Db 2221 GGGCGGTGAACCTTCAGAGGAGCGCTGAGAGCGTTGATGTCGAGGCAAAAGCACA 2280
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Qy 2341 TGCAGAGCTCAGACCTTTGAGCTCAGCAAAAGCCTCAGCAGCATGATGCCAAGACG 2400
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Qy 2401 TGTTCACATGAGGCTCAAAATCTGCGAGCAATCTAAAGTCCGATCCAGCCGCTGCA 2460
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 DB 2521 ACCTTGGGGTTTGCCAGGCAACAGCCGGCCCTGTGCAAGGCACTCTGAGAGCAAGTGG 2580
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 DB 2641 ACTGGGCTGATGCAAGAGAGTGGCCCTGTGCACTAGCAGGAGCCCTCACTCTCC 2700
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 DB 2941 CTTCCCGGAGTACAGAGCCCAAGAGATCCTGACTGCTGGCCCTGTGCTACCTACCA 3000
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 DB 3121 ATCCCTCCATCTCTGATCTCTATCGGGCTGGCAAGGCACTGTCCTTCCGAGTT 3180
 QY 3181 TCTGGAGAGCAAGGCTCCATGACTCCAGACAAGGAGTGGCGGGAGGCGCATGACCT 3240
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 DB 3301 TGGCCCAAGAGGGGGTCTGATGCGGTGACACAGCATTTCCCGCTCCGGAAGC 3360
 QY 3361 CCAAGGCTATGTTCAAGAGATCTCGGAGAGTGGCCAGAGGCTCCGCTG 3420
 DB 3361 CCAAGGCTATGTTCAAGAGATCTCGGAGAGTGGCCAGAGGCTCCGCTG 3420
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 DB 3421 TCCACAAGAGAGCCACTTATGTTTGGGGGATGTCGATGCGCCGGAGCTGG 3480
 QY 3481 CCAAGGCTATGTTCAAGAGATCTCGGAGAGTGGCCAGAGGCTCCGCTG 3540
 DB 3481 CCAAGGCTATGTTCAAGAGATCTCGGAGAGTGGCCAGAGGCTCCGCTG 3540
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DB 3541 ACTATTTCTTCAAGTCAAGAGCCAGAGGCTATCAGCAAGATATCTTGGTGTAT 3600
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 DB 3601 TTCTTACAGAGGCAAGAGAGAGTGGCGGTGACAGCCAGCAGCTTGAGATGTCAG 3660
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 QY 3841 GTAGACCCCTGATGATGAGGCTGCTCTCTCAAACTGGGGCTCCCTGTTCCCTGG 3900
 DB 3841 GTAGACCCCTGATGATGAGGCTGCTCTCTCAAACTGGGGCTCCCTGTTCCCTGG 3900
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 DB 3901 AGACAAATCTTAAATGCGCAGGCTGGGAGTGGGTGAAGATGAACTTGCTGAGT 3960
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 DB 3961 GCACCACTTCAAGTACAGCAGAGAGTGTATGACACACTGTGTATTAAGTCCCTG 4020
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 DB 4021 TGTACAGTATTTATGCTCTGTATTTAAACATCAACACCACTGCTGCCATGAGC 4080
 QY 4081 ACTTGGCTTCTCCCTGATGATTCCTTGATGAGATATTTACATGAATGCAATTTACTT 4140
 DB 4081 ACTTGGCTTCTCCCTGATGATTCCTTGATGAGATATTTACATGAATGCAATTTACTT 4140
 QY 4141 TATATC 4145
 DB 4141 TATATC 4145
 RESULT 6
 AAF21450
 ID AAF21450 standard; DNA; 8222 BP.
 XX AAF21450;
 AC 14-MAR-2001 (first entry)
 DT 14-MAR-2001 (first entry)
 XX Human inducible nitric oxide synthase polynucleotide fragment #3017.
 DE Low adenoviral antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 XX Homo sapiens.
 OS WO200062736-A2.
 PN 26-OCT-2000.
 PD 24-MAR-2000; 2000WO-US08020.
 PF
 XX

QY 1441 ACCAGCTGTCGTTGAGATCAACATTCGCTGATCCATAGTTTTCAGAGCAGATGTGA 1500
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QY 1501 CCATCATGAGACACACCTGCTGACAGATCTCTCATGAGTACATGACATGATATACC 1560
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Db 1501 CCATCATGAGACACACCTGCTGACAGATCTCTCATGAGTACATGATGATATATACC 1560
QY 1561 GATCCCGTGGGGGCTGCCCGGACAGATGATTTGGCTGCTCCCTCCATGCTGGAGCA 1620
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Db 1561 GATCCCGTGGGGGCTGCCCGGACAGATGATTTGGCTGCTCCCTCCATGCTGGAGCA 1620
QY 1621 TCACCCCGTGTTCACACAGAGATGCTAACTACGTCGTGCTCCCTTCTACTATATC 1680
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Db 1621 TCACCCCGTGTTCACACAGAGATGCTAACTACGTCGTGCTCCCTTCTACTATATC 1680
QY 1681 AGGTAGAGGCTGGAAAAACCATGTCTGGACAGACAGAGAGAGAGAGAGAGAGAG 1740
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Db 1681 AGGTAGAGGCTGGAAAAACCATGTCTGGACAGACAGAGAGAGAGAGAGAGAGAG 1740
QY 1741 AGATTCCATTGAAGTCTTGTCAAAGCTGTGCTCTTGTGCTGATGCTGAGCAAGA 1800
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Db 1741 AGATTCCATTGAAGTCTTGTCAAAGCTGTGCTCTTGTGCTGATGCTGAGCAAGA 1800
QY 1801 CAATGGCGTCCGAGTCAAGATCAACATCTTTTGGACAGACAGAGAGAGAGAGAG 1860
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Db 1801 CAATGGCGTCCGAGTCAAGATCAACATCTTTTGGACAGACAGAGAGAGAGAGAG 1860
QY 1861 CGCTGGCTGGGAGCTGGGGGCTTATTCAGCTGTGCTTACCCCAAGTGTCTGCA 1920
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Db 1861 CGCTGGCTGGGAGCTGGGGGCTTATTCAGCTGTGCTTACCCCAAGTGTCTGCA 1920
QY 1921 TGAATAGTACAGGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
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Db 1921 TGAATAGTACAGGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
QY 1981 CGTTTGGCAATGAGACTGCCCTTGGCAATGAGAGAGAGAGAGAGAGAGAGAG 2040
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Db 2041 TGAAGAGCTCAACAGCAAAATTCAGGTACGCTGTGCTTGGCTGCTGAGATGATAC 2100
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Db 2101 CTCGGTCTGCGCTTGTCTCATGACATTTGATCAGAGCTGTCCACCTGGGGCTCTC 2160
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QY 2401 TGTTCACATGAGGCTCAAAATCTGGAGAGATGATGATGATGATGATGATGATG 2460
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Db 2401 TGTTCACATGAGGCTCAAAATCTGGAGAGATGATGATGATGATGATGATGATG 2460
QY 2461 CCATCTGTGTGAGAGCTCTCTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2520
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Db 2461 CCATCTGTGTGAGAGCTCTCTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2520

QY 2521 ACCTTGGGGTTTCCAGAGCAACAGCCGGCTTGGTCCAGAGCATCTGAGAGAGTGG 2580
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Db 2521 ACCTTGGGGTTTCCAGAGCAACAGCCGGCTTGGTCCAGAGCATCTGAGAGAGTGG 2580
QY 2581 TGGATGGCCCCACACCCACACAGAGTGCCTGGAGAGAGAGAGAGAGAGAGAG 2640
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QY 2701 CGGACATCAACACACCCCAACACAGCTGCTGCTCAAAAGTGGGCGAGTGGCCACAG 2760
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QY 2761 AAGAGCTGAG 2820
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Db 2761 AAGAGCTGAG 2820
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|||||
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QY 2881 CTGCTGGCTTCCGCTTTCACAGCTCCCATTCCTGAAGCCAGGTTCTACTCATAGCT 2940
|||||
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QY 2941 CTTCCGGGATCACACGCCCCAGAGATCCACCTGAGCTGTGCTGCTGCTGCTGCT 3000
|||||
Db 2941 CTTCCGGGATCACACGCCCCAGAGATCCACCTGAGCTGTGCTGCTGCTGCTGCT 3000
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QY 3121 ATCCCTCCATCTTGCATCTCATCTGAGAGAGAGAGAGAGAGAGAGAGAGAG 3180
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QY 3181 TCTGGAG 3240
|||||
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QY 3301 TGGCCCAAG 3360
|||||
Db 3301 TGGCCCAAG 3360
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QY 3421 TCCACAG 3480
|||||
Db 3421 TCCACAG 3480
QY 3481 CCCACACCTGAG 3540
|||||
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QY 3541 ACTATTTCTTCAAGTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3600
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Db 3541 ACTATTTCTTCAAGTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3600
QY 3601 TTCCTTACAG 3660
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Db 3601 TTCTTACGAGGCGGAGGACAGGCTGGCGGTGCAGCCACGACCTGGAGATGTACG 3660
QY 3661 CGCTGAGGGCTACAGAGGAGGTTAAAGCTGCCGACACAGACTTAAGATGAGCCA 3720
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QY 3721 GCCTCATATATGAGAGTCACAGGCTGGGAGATGAGAGAAATGATTCCTCCAGC 3780
Db 3721 GCCTCATATATGAGAGTCACAGGCTGGGAGATGAGAGAAATGATTCCTCCAGC 3780
QY 3781 CTCAGCTTATTTCTCAACGTTGCTCCCATCAAGCCCTTACTTGAACCTCTTAACAA 3840
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QY 4081 ACTTGGCTCTCCCTGATGATTCCTGATGAGATATTTACATGAATTCATTTACTT 4140
Db 4081 ACTTGGCTCTCCCTGATGATTCCTGATGAGATATTTACATGAATTCATTTACTT 4140
QY 4141 TAATC 4145
Db 4141 TAATC 4145

RESULT 7
ID AAF20942 standard; DNA: 9513 BP.
XX
AC AAF20942:
XX
DT 14-MAR-2001 (first entry)
XX
DE Human low adenovine antisense oligonucleotide #2509.
XX
KW Low adenovine antisense oligonucleotide; phosphorothioate; allergy;
human; airway disorder; bronchoconstriction; lung inflammation;
surfactant depletion; respiratory; bronchodilator; antiinflammatory;
immunosuppressive; antihistaminic; analgesic; hypotensive; cytostatic;
respiratory obstruction; pulmonary obstruction; Impeded respiration;
surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
pulmonary hypertension; emphysema; pulmonary transplantation rejection;
chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US08020.
XX
PR 06-APR-1999; 99US-0127958.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.

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XX
PI Nyce JM;
XX
DR WPI: 2000-679539/66.
XX
PT Low adenovine (A) content antisense oligonucleotides which do not
PT trigger adenovine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -
XX
ES Disclosure; Page 737-739; 1592pp; English.
XX
CC The present invention describes low adenovine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antihistaminic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and/or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.
XX
SQ Sequence 9513 BP; 2107 A; 2868 C; 2672 G; 1866 T; 0 other;
XX
Query Match 100.0%; Score 4145; DB 21; Length 9513;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CTGCTTAAATCTCTCGGCGACCTTTGATGAGGCGACTGGCGACTTGTACAGACGTCGG 60
Db 1292 CTGCTTAAATCTCTCGGCGACCTTTGATGAGGCGACTGGCGACTTGTAGACAGTCCG 1351
QY 61 AAGTCTCAAGGACAGCTCTTCCTGCTTGAAGTCTTACCCGGGAGGACAGTGC 120
Db 1352 AAGTCTCAAGGACAGGCTCTTCCTGCTTGAAGTCTTACCCGGGAGGACAGTGC 1411
QY 121 AGCCAGCTGCAAGCCCACTGGAAGAACATCTGAGTCAATTCAGATAGTACATAA 180
Db 1412 AGCCAGCTGCAAGCCCACTGGAAGAACATCTGAGTCAATTCAGATAGTACATAA 1471
QY 181 GTGACCTGCTTTGTAAGCCATAGAGATGGCTCTGCTTGAATTTCTGTCAAGACA 240
Db 1472 GTGACCTGCTTTGTAAGCCATAGAGATGGCTCTGCTTGAATTTCTGTCAAGACA 1531
QY 241 AATTCACAGATGATGATGAGGAGGAGAAAGACATCAACATGAGAGAAACCC 300
Db 1532 AATTCACAGATGATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1591
QY 301 CCGTGGCACCCTCAGTCAAGTGAACAGATGAGTCACTTCAATACACACCTCAGCAAGC 360
Db 1592 CCGTGGCACCCTCAGTCAAGTGAACAGATGAGTCACTTCAATACACACCTCAGCAAGC 1651
QY 361 AGCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 420

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Db 1652 AGCAGATGAGTCCCGCAGCCCTCTGTGAGAGCGGAAAGATCTCCAGATCTCTGG 1711
Qy 421 TCAAGCTGGATGCAACCCCATTTGCTCCCGACGGCATGTAGAGATCAAAACTGGGCA 480
Db 1712 TCAAGCTGGATGCAACCCCATTTGCTCCCGACGGCATGTAGAGATCAAAACTGGGCA 1711
Qy 481 GCGGATGATCTTCCAGACACACTTCCATTAAGGCCAAAGGATTTTAATCTGACAGT 540
Db 1772 GCGGATGATCTTCCAGACACACTTCCATTAAGGCCAAAGGATTTTAATCTGACAGT 1831
Qy 541 CCAATCTTGGCTGGGGTCCATTTATGACTCCCAAAAGTTTGACAGAGACCAGGACA 600
Db 1832 CCAATCTTGGCTGGGGTCCATTTATGACTCCCAAAAGTTTGACAGAGACCAGGACA 1891
Qy 601 AGCCTACCCCTCCAGATGAGCTTACTCAAGCTATGCAATTTGTACCAACATATTAG 660
Db 1892 AGCCTACCCCTCCAGATGAGCTTACTCAAGCTATGCAATTTGTACCAACATATTAG 1951
Qy 661 GCTCTCTTCAAGAGGCAAAATAGAGAAATCTGGCCAGGCTGGAAGCGTTAAACAAG 720
Db 1952 GCTCTCTTCAAGAGGCAAAATAGAGAAATCTGGCCAGGCTGGAAGCGTTAAACAAG 2011
Qy 721 AGATAGAAACAAGAAACCTACCACTGACGAGGAGATGAGCTATCTTCCACCAAGC 780
Db 2012 AGATAGAAACAAGAAACCTACCACTGACGAGGAGATGAGCTATCTTCCACCAAGC 2071
Qy 781 AGGCTTGGCGCAATGCCCAAGCTGATTTGGAGAGATCCAGTGGTCCACCTGAGGCT 840
Db 2072 AGGCTTGGCGCAATGCCCAAGCTGATTTGGAGAGATCCAGTGGTCCACCTGAGGCT 2131
Qy 841 TCGATGGCCCGAGCTGTTCACACGTCGCCGGAATGTTTGAACACATCTGACAGCTGC 900
Db 2132 TCGATGGCCCGAGCTGTTCACACGTCGCCGGAATGTTTGAACACATCTGACAGCTGC 2191
Qy 901 GTTACTCCACCAACAATGGAACATCAGTTCGGGCATCAGCTGTTCCCGACGAGAGT 960
Db 2192 GTTACTCCACCAACAATGGAACATCAGTTCGGGCATCAGCTGTTCCCGACGAGAGT 2251
Qy 961 ATGGCAAGCAGACCTTCCGGGTGTGAATGCTCAGCTCATCCGCTATGCTGGCTACAGA 1020
Db 2252 ATGGCAAGCAGACCTTCCGGGTGTGAATGCTCAGCTCATCCGCTATGCTGGCTACAGA 2311
Qy 1021 TGCAGATGGCAGATCAGAGGGGACCTGCCAAGCGTGAATCAGCTCAGCTGTGATG 1080
Db 2312 TGCAGATGGCAGATCAGAGGGGACCTGCCAAGCGTGAATCAGCTCAGCTGTGATG 2371
Qy 1081 ACCTGGGCTGGAAGCCCAAGTACGGCGCTTCGATGTGTCCTCCCTGTCCTCAGAGCA 1140
Db 2372 ACCTGGGCTGGAAGCCCAAGTACGGCGCTTCGATGTGTCCTCCCTGTCCTCAGAGCA 2431
Qy 1141 ATGGCCGTGACCTGTGAGCTTCTGAATCCACCTGACCTTGTCTTGAAGTGGCCATG 1200
Db 2432 ATGGCCGTGACCTGTGAGCTTCTGAATCCACCTGACCTTGTCTTGAAGTGGCCATG 2491
Qy 1201 AACATCCCAAAATGAGTGGTTTCGGAACTGAGCTAAAGTGTACGGCCCTGCGAG 1260
Db 2492 AACATCCCAAAATGAGTGGTTTCGGAACTGAGCTAAAGTGTACGGCCCTGCGAG 2551
Qy 1261 TGGCCAACTGCTGTTGAGGTGGGCGGCTGAGTTTCCAGAGGTGCCCCCTTCAATGCT 1320
Db 2552 TGGCCAACTGCTGTTGAGGTGGGCGGCTGAGTTTCCAGAGGTGCCCCCTTCAATGCT 2611
Qy 1321 GGTACATGGGCAAGAGATCGAGTCCGGGACTTCTGTAGCTCCAGCGCTCAACATCC 1380
Db 2612 GGTACATGGGCAAGAGATCGAGTCCGGGACTTCTGTAGCTCCAGCGCTCAACATCC 2671
Qy 1381 TGGAGAAAGTGGGCAAGAGATCGAGTCCGGGACTTCTGTAGCTCCAGCGCTCAACATCC 1440
Db 2672 TGGAGAAAGTGGGCAAGAGATCGAGTCCGGGACTTCTGTAGCTCCAGCGCTCAACATCC 2731
Qy 1441 ACCAGGCTGCTGTGATCAACATTTGCTGTATCCATAGTTTTCAGAGAGAAATGTA 1500
Db 2732 ACCAGGCTGCTGTGATCAACATTTGCTGTATCCATAGTTTTCAGAGAGAAATGTA 2791
Qy 1501 CCAATCATGACCAACACCTGGCTGCAGAAATCCTTCAATGAAGTACATGCAATGAAATACC 1560
Db 2792 CCAATCATGACCAACACCTGGCTGCAGAAATCCTTCAATGAAGTACATGCAATGAAATACC 2851
Qy 1561 GGTCCCGTGGGGGCTGCCGGGAGACTGGATTTGGCTGGTCCCTCCATGTCTGGAGAGA 1620
Db 2852 GGTCCCGTGGGGGCTGCCGGGAGACTGGATTTGGCTGGTCCCTCCATGTCTGGAGAGA 2911
Qy 1621 TCAACCCCGGTGTTTCAACAGAGATGCTGAACTAGTCTGTCCTCTCTACTACTATC 1680
Db 2912 TCAACCCCGGTGTTTCAACAGAGATGCTGAACTAGTCTGTCCTCTCTACTACTATC 2971
Qy 1681 AGGTAGAGGCTGGAAACCCATGTCTGTCAGAGAGAGAGGAGAGCCCAAGAGAG 1740
Db 2972 AGGTAGAGGCTGGAAACCCATGTCTGTCAGAGAGAGAGGAGAGCCCAAGAGAG 3031
Qy 1741 AGATTCATTTGAAGTCTTGTGCAAAAGCTGTCTCTTTCCTGTATGCTGATGCCAAGA 1800
Db 3032 AGATTCATTTGAAGTCTTGTGCAAAAGCTGTCTCTTTCCTGTATGCTGATGCCAAGA 3091
Qy 1801 CAATGGCGTCCGAGTCAAGATCACCATCTCTTTGCGACAGAGAGAGAAATAGAGAG 1860
Db 3092 CAATGGCGTCCGAGTCAAGATCACCATCTCTTTGCGACAGAGAGAGAAATAGAGAG 3151
Qy 1861 CGCTGGCGTGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGGTGTCTGCA 1920
Db 3152 CGCTGGCGTGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGGTGTCTGCA 3211
Qy 1921 TGGATTAAGTACAGGCTGAGCTGCTGGAGAGAGAGGCTGTGTTGGTGGAGACACTA 1980
Db 3212 TGGATTAAGTACAGGCTGAGCTGCTGGAGAGAGAGGCTGTGTTGGTGGAGACACTA 3271
Qy 1981 CGTTTGGCAATGAGACTGCTGCGCAATGAGAGAAACTGAAGAAATGCTTTCATGC 2040
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Qy 2041 TGAAGAGCTCAACAACAAATTCAGTACGCTGTGTTGGCTCGGCTCCAGCATATAC 2100
Db 3332 TGAAGAGCTCAACAACAAATTCAGTACGCTGTGTTGGCTCGGCTCCAGCATATAC 3391
Qy 2101 CTCGGTTTTCGCCCTTGTGCTATGATGATCAGAACTGCTCCACCTGGGGGCTCTC 2160
Db 3392 CTCGGTTTTCGCCCTTGTGCTATGATGATCAGAACTGCTCCACCTGGGGGCTCTC 3451
Qy 2161 AGCTACCCCGATGGGAGAGGGGATGAGCTCAGTGGGCGAGAGAGCGCTTCCGAGCT 2220
Db 3452 AGCTACCCCGATGGGAGAGGGGATGAGCTCAGTGGGCGAGAGAGCGCTTCCGAGCT 3511
Qy 2221 GGGCCGTCAAAACCTTCAAGGAGGCTGTGAGAGTGTGATGTCGAGGCAAAACAGACA 2280
Db 3512 GGGCCGTCAAAACCTTCAAGGAGGCTGTGAGAGTGTGATGTCGAGGCAAAACAGACA 3571
Qy 2281 TTCAATCCCAAGCTCTTACACCTTCAATGTGACTGGGACCCGACACTACAGGCTGC 2340
Db 3572 TTCAATCCCAAGCTCTTACACCTTCAATGTGACTGGGACCCGACACTACAGGCTGC 3631
Qy 2341 TGCAGAGCTCAGAGCTTGTGAACTCAGCAAGGCTCAGAGAGATGATGCAAGAG 2400
Db 3632 TGCAGAGCTCAGAGCTTGTGAACTCAGCAAGGCTCAGAGAGATGATGCAAGAG 3691
Qy 2401 TGTTCACCATGAGGCTCAAAATCTGGGAGATCTACAAAGTCCGACATCCAGCGTGGCA 2460
Db 3692 TGTTCACCATGAGGCTCAAAATCTGGGAGATCTACAAAGTCCGACATCCAGCGTGGCA 3751
Qy 2461 CCATCTGTGTGGAATCTCTGTGAGATGGCCAAAGGCTTGAATACCTCCGCGGGAGC 2520
Db 3752 CCATCTGTGTGGAATCTCTGTGAGATGGCCAAAGGCTTGAATACCTCCGCGGGAGC 3811
Qy 2521 ACCTTGGGGTGTGGCCAGGCAACGAGCGGCGCTGTGTCGAAGGATCTTGGAGCGAGTG 2580
Db 3812 ACCTTGGGGTGTGGCCAGGCAACGAGCGGCGCTGTGTCGAAGGATCTTGGAGCGAGTG 3871


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Db 2912 TCACCCCGTGTTCACCGAGAGATGCTGACCTCTGCTCCCTTCTACTCTATC 2971
Oy 1681 AGGTAAAGGCTCGAAACCATGCTGGCAGAGAGAGAGGAGGAGACCCAGAGAGAG 1740
Db 2972 AGGTAAAGGCTCGAAACCATGCTGGCAGAGAGAGAGAGAGGAGAGAGAGAGAG 3031
Oy 1741 AGATTCATTTGAAAGTCTTGCTCAAAAGCTGTGCTCTTTGCTGTATGCTGATGCGCAGA 1800
Db 3032 AGATTCATTTGAAAGTCTTGCTCAAAAGCTGTGCTCTTTGCTGTATGCTGATGCGCAGA 3091
Oy 1801 CAATGGGCTCCGAGTCAGAGTACCATCTCTTTGCGACAGAGAGAGAGAGAGAGAGAGAG 1860
Db 3092 CAATGGGCTCCGAGTCAGAGTACCATCTCTTTGCGACAGAGAGAGAGAGAGAGAGAGAG 3151
Oy 1861 CGGTGGGCTGGAGCTGGGGGGCTTATTCAGTGTGCTCTTCAACCCCAAGTGTCTGCA 1920
Db 3152 CGGTGGGCTGGAGCTGGGGGGCTTATTCAGTGTGCTCTTCAACCCCAAGTGTCTGCA 3211
Oy 1921 TGGATTAAGTACAGGCTGAGCTGCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
Db 3212 TGGATTAAGTACAGGCTGAGCTGCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3271
Oy 1981 CGTTGGCAATGAGAGTACGCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2040
Db 3272 CGTTGGCAATGAGAGTACGCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3331
Oy 2041 TGAAGAGCTCAACACAAATTCAGTACGCTGTGTTGGCTCGGCTCCAGCATGATAC 2100
Db 3332 TGAAGAGCTCAACACAAATTCAGTACGCTGTGTTGGCTCGGCTCCAGCATGATAC 3391
Oy 2101 CTGGGTTCTGGGCTTTGCTCATATGATATGATGAGAGTGTGCTGAGAGAGAGAGAGAG 2160
Db 3392 CTGGGTTCTGGGCTTTGCTCATATGATATGATGAGAGTGTGCTGAGAGAGAGAGAGAG 3451
Oy 2161 AGCTCACCCCGATGGAGAGAGAGAGAGAGTCACTGGGAGAGAGAGAGAGAGAGAGAG 2220
Db 3452 AGCTCACCCCGATGGAGAGAGAGAGAGAGTCACTGGGAGAGAGAGAGAGAGAGAGAG 3511
Oy 2221 GGGCGGTGCAAACTTCAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2280
Db 3512 GGGCGGTGCAAACTTCAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3571
Oy 2281 TTCAGATCCCAAGAGCTTACACCTCAATGATGAGCTGGGAGAGAGAGAGAGAGAGAGAG 2340
Db 3572 TTCAGATCCCAAGAGCTTACACCTCAATGATGAGCTGGGAGAGAGAGAGAGAGAGAGAG 3631
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Db 3692 TGTTCACCATGAGAGCTTCAAACTGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3751
Oy 2461 CCATCTCTGTGAGACTCTCTGTGAGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2520
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Oy 2521 ACCTTGGGGTTTGGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2580
Db 3812 ACCTTGGGGTTTGGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3871
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Db 3872 TGGATGGGGCCCAACCCCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3931
Oy 2641 ACTGGGATGATGACAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2700
Db 3932 ACTGGGATGATGACAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3991
Oy 2701 CGGACATTCACGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2760

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Db 3992 CGGACATTCACGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4051
Oy 2761 AAGAGCTGAGAGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2820
Db 4052 AAGAGCTGAGAGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4111
Oy 2821 AGTTACACCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2880
Db 4112 AGTTACACCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4171
Oy 2881 CTGGGCTTCTGCTCTTCCAGCTCCCATTTCTGAAGAGAGAGAGAGAGAGAGAGAGAGAG 2940
Db 4172 CTGGGCTTCTGCTCTTCCAGCTCCCATTTCTGAAGAGAGAGAGAGAGAGAGAGAGAGAG 4231
Oy 2941 CCTCCGGGATCACAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3000
Db 4232 CCTCCGGGATCACAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4261
Oy 3001 CCGGAGATGGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3060
Db 4292 CCGGAGATGGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4351
Oy 3061 AGCCCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3120
Db 4352 AGCCCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4411
Oy 3121 ATCCCTCCATCTTGTGATCTGATCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3180
Db 4412 ATCCCTCCATCTTGTGATCTGATCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4471
Oy 3181 TCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3240
Db 4472 TCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4531
Oy 3241 TGGTGTGGTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3300
Db 4532 TGGTGTGGTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4591
Oy 3301 TGGCCCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3360
Db 4592 TGGCCCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4651
Oy 3361 CCAAGGCTATGTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3420
Db 4652 CCAAGGCTATGTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4711
Oy 3421 TCCACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3480
Db 4712 TCCACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4771
Oy 3481 CCGACACCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3540
Db 4772 CCGACACCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4831
Oy 3541 ACTATTCTTTCAGCTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3600
Db 4832 ACTATTCTTTCAGCTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4891
Oy 3601 TTCCTTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3660
Db 4892 TTCCTTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4951
Oy 3661 CGCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3720
Db 4952 CGCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5011
Oy 3721 GCTCTGATTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3780
Db 5012 GCTCTGATTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5071
Oy 3781 CTCAAGTCTTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3840
Db 5072 CTCAAGTCTTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5131

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QY 3841 GTAGACCCCTGGATTGATGAGAGCCTCTCTCAAACTGGGGGCTCCCTGTCCTTGG 3900
 DB 5132 GTAGACCCCTGGATTGATGAGAGCCTCTCTCTCAAACTGGGGGCTCCCTGTCCTTGG 5191
 QY 3901 AACAATAATCTTAAATGCGAGGCTGGCGAGTGGGTGAAGATGGAACCTGCTGAGT 3960
 DB 5192 AACAATAATCTTAAATGCGAGGCTGGCGAGTGGGTGAAGATGGAACCTGCTGAGT 5251
 QY 3961 GCACCACTTCAAGTACACACAGGAGGAGTGCATGCGACCACTGCTGATTTAACTGCTTG 4020
 DB 5252 GCACCACTTCAAGTACACACAGGAGGAGTGCATGCGACCACTGCTGATTTAACTGCTTG 5311
 QY 4021 TGTACAGTTATTTATGCTCTGTATTTAAAAAACAACACCACTGCTGCTGAGC 4080
 DB 5312 TGTACAGTTATTTATGCTCTGTATTTAAAAAACAACACCACTGCTGCTGAGC 5371
 QY 4081 ACTGGGCTTCCCTGCTGATGATTCCTTATGAGATATTTACATGAAATTCATTTACTT 4140
 DB 5372 ACTGGGCTTCCCTGCTGATGATTCCTTATGAGATATTTACATGAAATTCATTTACTT 5431
 QY 4141 TAATC 4145
 DB 5432 TAATC 5436

RESULT 9
 AAF21436
 ID AAF21436 standard; DNA: 35384 BP.

AC AAF21436:

DT 14-MAR-2001 (first entry)

XX Human enzyme-related antisense polynucleotide #3003.

XX Low adenosine antisense oligonucleotide: phosphorothioate; allergy;
 human: airway disorder; bronchoconstriction; lung inflammation;
 immunosuppressive; antiallergic; antihistaminic; antipneumonia;
 immunosuppressive; antiallergic; antihistaminic; antipneumonia;
 surfactant obstruction; pulmonary obstruction; impeded respiration;
 surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 cancer; ss.

OS Homo sapiens.

PN WO200062736-A2.

PD 26-OCT-2000.

PF 24-MAR-2000: 2000WO-US08020.

PR 06-APR-1999: 99US-0127958.

PA (UYEC-) UNIV EAST CAROLINA.

PI (NYCE/) NYCE J W.

PI NYCE JW:

DR WPI: 2000-679539/66.

PT Low adenosine (A) content antisense oligonucleotides which do not
 trigger adenosine receptors during metabolism, useful e.g. for treating
 cancers and respiratory obstructions -

PS Disclosure: Page 47-55: 1592pp: English.

CC The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'universal' or alternative base.

CC (1) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiallergic, antipneumonia, antipneumonia,
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins and
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention.

Sequence 35384 BP: 7013 A; 10128 C; 10025 G; 7883 T; 335 other;

Query Match 100.0%; Score 4145; DB 21; Length 35384;
 Best Local Similarity 100.0%; Pred. No. 0;

Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTGCTTTAAATCTCTGCGCACCTTTGATGAGGAGTGGGACCTTGTACAGTCCCG 60
 DB 27163 CTGCTTTAAATCTCTGCGCACCTTTGATGAGGAGTGGGACCTTGTACAGTCCCG 27222
 QY 61 AAGTCTCAAGGACAGGCTCTTCTGTTGACTGTCCTTACCCCGGAGGACATGC 120
 DB 27223 AAGTCTCAAGGACAGGCTCTTCTGTTGACTGTCCTTACCCCGGAGGACATGC 27282
 QY 121 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGACTCAATTCAGATGAAGTGAAT 180
 DB 27283 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGACTCAATTCAGATGAAGTGAAT 27342
 QY 181 GAGACCTGCTTGTAAAGCCATAGAGATGCGCTGTCTTGTGAATTTCTTCAAGACA 240
 DB 27343 GAGACCTGCTTGTAAAGCCATAGAGATGCGCTGTCTTGTGAATTTCTTCAAGACA 27402
 QY 241 AATTCACCACTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300
 DB 27403 AATTCACCACTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 27462
 QY 301 CCGTGGCACTCCAGTCCAGTGCAGAGATGATGATGATGATGATGATGATGATGATGAT 360
 DB 27463 CCGTGGCACTCCAGTCCAGTGCAGAGATGATGATGATGATGATGATGATGATGATGAT 27522
 QY 361 AGCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420
 DB 27523 AGCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 27582
 QY 421 TCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 480
 DB 27583 TCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 27642
 QY 481 GCGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 540
 DB 27643 GCGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 27702
 QY 541 CCAATCTTGGCTGGGCTGCTATGATGATGATGATGATGATGATGATGATGATGATGAT 600
 DB 27703 CCAATCTTGGCTGGGCTGCTATGATGATGATGATGATGATGATGATGATGATGATGAT 27762

QY	601	AGCTTACCCCTCCAGATGAGCTTCTACTCTCAAGTATCGAATTTGTCAACCAATATTACG	660
Db	27763	AGCCTACCCCTCCAGATGAGCTTCTACTCTCAAGTATCGAATTTGTCAACCAATATTACG	27822
QY	661	GCTCTTCAAGAGGACAAAATATAGAGAACATCTGGCCAGGGTGGAAACGGTAACTAAAGG	720
Db	27823	GCTCTTCAAGAGGACAAAATATAGAGAACATCTGGCCAGGGTGGAAACGGTAACTAAAGG	27882
QY	721	AGATAGAAACACACAGGAACCTTACCACTGACAGGGAGATGAGCTCATCTTGGCCACCAAGC	780
Db	27883	AGATAGAAACACACAGGAACCTTACCACTGACAGGGAGATGAGCTCATCTTGGCCACCAAGC	27942
QY	781	AGGCTGGCGCAATGGCCACGCTGCACTTGGAGAGATCCACTGGTCCAAACCTGCAGGCTCT	840
Db	27943	AGGCTGGCGCAATGGCCACGCTGCACTTGGAGAGATCCACTGGTCCAAACCTGCAGGCTCT	28002
QY	841	TGATGCCCCGCAAGCTGTTCCACTCGCCGGGAAATGTTGAACACATCTGCAGACACGGC	900
Db	28003	TGATGCCCCGCAAGCTGTTCCACTCGCCGGGAAATGTTGAACACATCTGCAGACACGGC	28062
QY	901	GTTACTCCACCAACATGGCAACATCAGGTGGGCAATCAGCTGTTTCCCCACGGCGAATG	960
Db	28063	GTTACTCCACCAACATGGCAACATCAGGTGGGCAATCAGCTGTTTCCCCACGGCGAATG	28122
QY	961	ATGCGACGACGACTTCCGGGGTGTGGAAATGCTCAGCTATCCGCTATGCTGGCTAACGA	1020
Db	28123	ATGCGACGACGACTTCCGGGGTGTGGAAATGCTCAGCTATCCGCTATGCTGGCTAACGA	28182
QY	1021	TGCCAGATGGGACGATCAGAGGGGACCCGCAACGTGGAATTCATCAGCTGTGCATCG	1080
Db	28183	TGCCAGATGGGACGATCAGAGGGGACCCGCAACGTGGAATTCATCAGCTGTGCATCG	28242
QY	1081	ACCTGGGCTGGAAGCCCAAGTACGGGCGCTTGGATGTGTTGCCCTGGTCTGTCAAGCCCA	1140
Db	28243	ACCTGGGCTGGAAGCCCAAGTACGGGCGCTTGGATGTGTTGCCCTGGTCTGTCAAGCCCA	28302
QY	1141	ATGGCGGTGACCCCTGAGGCTCTCGAAATCCCACTGCACCTTGGCTTGGTGGGTGGCATG	1200
Db	28303	ATGGCGGTGACCCCTGAGGCTCTCGAAATCCCACTGCACCTTGGCTTGGTGGGTGGCATG	28362
QY	1201	AACATCCCAATACGAGTGGTTTCGGGGAATGGAGCTAAAGTGGTACGGCCTTGCTGCAG	1260
Db	28363	AACATCCCAATACGAGTGGTTTCGGGGAATGGAGCTAAAGTGGTACGGCCTTGCTGCAG	28422
QY	1261	TGGCCACATGCTGCTTGGAGGTGGGGGGGCTGGAGTCCCAAGGTGGCCCTTCATGGGT	1320
Db	28423	TGGCCACATGCTGCTTGGAGGTGGGGGGGCTGGAGTCCCAAGGTGGCCCTTCATGGGT	28482
QY	1321	GGTACATGGGCACAGAGATCGAGTCCGGGACTTCTGTAGCTGCACGGCTACCAACATCC	1380
Db	28483	GGTACATGGGCACAGAGATCGAGTCCGGGACTTCTGTAGCTGCACGGCTACCAACATCC	28542
QY	1381	TGGAGAAATGGGCACAGAAATGGGCTGTGAAACGCAACAAGCTGGGCTGTGGAAAG	1440
Db	28543	TGGAGAAATGGGCACAGAAATGGGCTGTGAAACGCAACAAGCTGGGCTGTGGAAAG	28602
QY	1441	ACCAGGCTGTGTTGAGATCAACATGTGCTGATCCATAGTTTTCGAAGACAGAAATGGA	1500
Db	28603	ACCAGGCTGTGTTGAGATCAACATGTGCTGATCCATAGTTTTCGAAGACAGAAATGGA	28662
QY	1501	CCATCATGACACACCACTGGGCTGCAGAAATCTTCAATGAATACATGCAAGATGAAATACC	1560
Db	28663	CCATCATGACACACCACTGGGCTGCAGAAATCTTCAATGAATACATGCAAGATGAAATACC	28722
QY	1561	GGTCCCGTGGGGGCTGGCGGACAGATCGAATTTGGGTGGGTCCCTCCCATGTCTGGAGACA	1620
Db	28723	GGTCCCGTGGGGGCTGGCGGACAGATCGAATTTGGGTGGGTCCCTCCCATGTCTGGAGACA	28782
QY	1621	TCACCCCCGTGTTTCAACAGAGATGCTGAACACTGCTGTGCCCTTCTACTACTATC	1680
Db	28783	TCACCCCCGTGTTTCAACAGAGATGCTGAACACTGCTGTGCCCTTCTACTACTATC	28842
QY	1681	AGGTAGAGGCTTGAAAAACCATGTCTGGCAGGACGAAGAGCGGAGACCAACAGAAAGG	1740

Dh	28843	AGGTAGAGGCGCTTGAAAACCCATGTCTTGCGCGAGCGAAGAGCGGAAGCCGAACCAAGAGAAAG	28902
Qy	1741	AGATTCATTGAAAGCTTTGGTGCAAAGGTGAGCTCTTTGGCTGTATGTGATGTCGCAAGA	1800
Dh	28903	AGATTCATTGAAAGCTTTGGTGCAAAGGTGAGCTCTTTGGCTGTATGTGATGTCGCAAGA	28962
Qy	1801	CAATGGGCGTCCGAGTCAGAGTCACCATCTCTTTGGCAGACAGAGACAGAAAATCAGAG	1860
Dh	28963	CAATGGGCGTCCGAGTCAGAGTCACCATCTCTTTGGCAGACAGAGACAGAAAATCAGAG	29022
Qy	1861	CGCTGCGCTTGGAGACCTGGGGGGGCGCTATTCACCTGTGCGCTTCAACCCCAAGGTGTGTGCA	1920
Dh	29023	CGCTGCGCTTGGAGACCTGGGGGGGCGCTATTCACCTGTGCGCTTCAACCCCAAGGTGTGTGCA	29082
Qy	1921	TGATTAAGTACAGAGCTGACCTCGCTGGAGAGGAACGGCTGTCTGTGTGTGTGATCCAGTA	1980
Dh	29083	TGATTAAGTACAGAGCTGACCTCGCTGGAGAGGAACGGCTGTCTGTGTGTGTGATCCAGTA	29142
Qy	1981	CGTTTGGCAATGAGACCTCGCTGGCAATGGAGAGAAACTGAGAAATCGCTTTATATCG	2040
Dh	29143	CGTTTGGCAATGAGACCTCGCTGGCAATGGAGAGAAACTGAGAAATCGCTTTATATCG	29202
Qy	2041	TGAAGAAGCTCAACAACAATTCAGGTACGCGTGTGTGTGGCTTGCGCTCCAGCATGTACC	2100
Dh	29203	TGAAGAAGCTCAACAACAATTCAGGTACGCGTGTGTGTGGCTTGCGCTCCAGCATGTACC	29262
Qy	2101	CTGCGTTCTCGCGCTTTGCTCATGACATTTGATCAGAACTGTCCCACTTGGGGGCGCTTC	2160
Dh	29263	CTGCGTTCTCGCGCTTTGCTCATGACATTTGATCAGAACTGTCCCACTTGGGGGCGCTTC	29322
Qy	2161	AGCTACACCCGATGGGAGAGGGGATGACCTACGTGCGGCGAGAGAGCGCTTCCGACGT	2220
Dh	29323	AGCTACACCCGATGGGAGAGGGGATGACCTACGTGCGGCGAGAGAGCGCTTCCGACGT	29382
Qy	2221	GGGCGGTGCAAACTTCAAGGCAAGCCTGTGAGAGCTTGTATGTCCGAGGCAAAACAGACAA	2280
Dh	29383	GGGCGGTGCAAACTTCAAGGCAAGCCTGTGAGAGCTTGTATGTCCGAGGCAAAACAGACAA	29442
Qy	2281	TTTGAGATCCCAAGCTCTACACCTCCAAATGTACCTGGGAGCCCGACACACTACAGGCTCG	2340
Dh	29443	TTTGAGATCCCAAGCTCTACACCTCCAAATGTACCTGGGAGCCCGACACACTACAGGCTCG	29502
Qy	2341	TGCAGACTCAGACGCTTTGGACCTCAGCAAAAGCCTCAGACATGATGTGCCAAGACG	2400
Dh	29503	TGCAGACTCAGACGCTTTGGACCTCAGCAAAAGCCTCAGACATGATGTGCCAAGACG	29562
Qy	2401	TGTTACCATATGAGGCTCAAAATCTCGGAGATCTCAAAAGTCCGACATCCAGCGGTGCCA	2460
Dh	29563	TGTTACCATATGAGGCTCAAAATCTCGGAGATCTCAAAAGTCCGACATCCAGCGGTGCCA	29622
Qy	2461	CCATCCTGTTGGAACCTCTCTGTGAGAGATGGCCAAAGGCGTGAATCTACTGCGGGGAGAC	2520
Dh	29623	CCATCCTGTTGGAACCTCTCTGTGAGAGATGGCCAAAGGCGTGAATCTACTGCGGGGAGAC	29682
Qy	2521	ACCTTGGGGGTTTGGCCAGAGGAACACAGCGGCGCTGTGTCCAAAGCATCTGTGAGCGAGATGG	2580
Dh	29683	ACCTTGGGGGTTTGGCCAGAGGAACACAGCGGCGCTGTGTCCAAAGCATCTGTGAGCGAGATGG	29742
Qy	2581	TGAGTGGCCCCACACCCACCAGACAGTGGCGCTGAGAGACCTGGATGAGATGGGACGT	2640
Dh	29743	TGAGTGGCCCCACACCCACCAGAGAGTGGCGCTGAGAGACCTGGATGAGATGGGACGT	29802
Qy	2641	ACTGGGTCATGTACAGAGGCTGCGCCCTGCTCATCTCAGCCAGGCGCTTCACTACATCTCC	2700
Dh	29803	ACTGGGTCATGTACAGAGGCTGCGCCCTGCTCATCTCAGCCAGGCGCTTCACTACATCTCC	29862
Qy	2701	CGGACATCCACACACCCCAACCCAGATGTGTCTCAAAAGCTGGCCAGCTGTGCCACAG	2760
Dh	29863	CGGACATCCACACACCCCAACCCAGATGTGTCTCAAAAGCTGGCCAGAGTGGGCCACAG	29922
Qy	2761	AAGAGCTGTAGAGACAGAGGCTGAGGCGCTGTGCCAGCGCTTCAAGATACAGAAATGTGA	2820

Db 29923 AAGAGCTGAGAGACAGAGGCTGAGGCGCTGTGCCAGCCCTCAAGATACAGCACTGGA 29982
 QY 2821 AGTTCAACCAACAGCCACATCTCTGAGGTGCTAGAGAGATTCCGTCCTGCGGGTGT 2880
 Db 29983 AGTTCAACCAACAGCCACATCTCTGAGGTGCTAGAGAGATTCCGTCCTGCGGGTGT 30042
 QY 2881 CTGCTGGCTTCTGCTTTTCCAGCTCCCATTTCTGAAGCCAGGTTCTATCTCATAGCT 2940
 Db 30043 CTGCTGGCTTCTGCTTTTCCAGCTCCCATTTCTGAAGCCAGGTTCTATCTCATAGCT 30102
 QY 2941 CTTCCCGGGATTCACAGCCAGGAGATCACAGTACTGTGGCCGCTGGTCACTTACCA 3000
 Db 30103 CTTCCCGGGATTCACAGCCAGGAGATCACAGTACTGTGGCCGCTGGTCACTTACCA 30162
 QY 3001 CCGAGATGAGCCAGGCTCCCTGACACAGGATGTCTGACAGCATAGGTTCAACAGCTGA 3060
 Db 30163 CCGAGATGAGCCAGGCTCCCTGACACAGGATGTCTGACAGCATAGGTTCAACAGCTGA 30222
 QY 3061 AGCCCAAGACCAAGTCCCTGCTTTGTGCGGATGCCAGCGCTTCCACCTCCCGAGG 3120
 Db 30223 AGCCCAAGACCAAGTCCCTGCTTTGTGCGGATGCCAGCGCTTCCACCTCCCGAGG 30282
 QY 3121 ATCCCTCCATCTGATCTGATGAGGCGCTGGACAGGATCGTGGCTTCCGAGTT 3180
 Db 30283 ATCCCTCCATCTGATCTGATGAGGCGCTGGACAGGATCGTGGCTTCCGAGTT 30342
 QY 3181 TCTGACAGCAAGGCTCATGACTCCACAGCAAGGAGATGGCGGAGGCGCATGACT 3240
 Db 30343 TCTGACAGCAAGGCTCATGACTCCACAGCAAGGAGATGGCGGAGGCGCATGACT 30402
 QY 3241 TGTGTTTGGTGTCCGCGCCAGATGAGAGCCACATCTACAGAGAGATGCTGAGA 3300
 Db 30403 TGTGTTTGGTGTCCGCGCCAGATGAGAGCCACATCTACAGAGAGATGCTGAGA 30462
 QY 3301 TGGCCAGAGAGGGGTGTGCATGGGTGCACACAGCCATTCGCCGCTGCTGGCAAGC 3360
 Db 30463 TGGCCAGAGAGGGGTGTGCATGGGTGCACACAGCCATTCGCCGCTGCTGGCAAGC 30522
 QY 3361 CCAAGGCTCATGTTTCAGACATCTGCGGACAGCTGAGCGAGGTTCCGCTGCTGTC 3420
 Db 30523 CCAAGGCTCATGTTTCAGACATCTGCGGACAGCTGAGCGAGGTTCCGCTGCTGTC 30582
 QY 3421 TCCACAGAGAGCCAGGCCACTCTATGTTTGGCGGAGTGTGGCATGGCCCGGAGAGTGG 3480
 Db 30583 TCCACAGAGAGCCAGGCCACTCTATGTTTGGCGGAGTGTGGCATGGCCCGGAGAGTGG 30642
 QY 3481 CCCACACCTGAGAGAGCTGTGGTGGCCCAAGCTGAATTAATAGAGAGAGCTGAGG 3540
 Db 30643 CCCACACCTGAGAGAGCTGTGGTGGCCCAAGCTGAATTAATAGAGAGAGCTGAGG 30702
 QY 3541 ACTATTTCTTTCAGCTCAAGAGCCAGAGCGCTATCAGAGATATCTTCGCTGCTGAT 3600
 Db 30703 ACTATTTCTTTCAGCTCAAGAGCCAGAGCGCTATCAGAGATATCTTCGCTGCTGAT 30762
 QY 3601 TTCTTACAGAGCGAAGAGAGAGAGGCTGCGGTGACGCCAGCCTCGAGATGTCAG 3660
 Db 30763 TTCTTACAGAGCGAAGAGAGAGAGGCTGCGGTGACGCCAGCCTCGAGATGTCAG 30822
 QY 3661 CGCTCTGAGAGGCTTACAGAGAGGTTAAAGCTGCCGGACAGAACTTAAGATGAGAGCA 3720
 Db 30823 CGCTCTGAGAGGCTTACAGAGAGGTTAAAGCTGCCGGACAGAACTTAAGATGAGAGCA 30882
 QY 3721 GCTTGCATTTATCTAGAGTACAGAGGCTGGGAGATGAGAGAAAGTATATCCCCAGC 3780
 Db 30883 GCTTGCATTTATCTAGAGTACAGAGGCTGGGAGATGAGAGAAAGTATATCCCCAGC 30942
 QY 3781 CTCAAGTCTTATTTCTCAAGCTGCTCCCATCAAGGCTTTACTTACCTCTCAACAA 3840
 Db 30943 CTCAAGTCTTATTTCTCAAGCTGCTCCCATCAAGGCTTTACTTACCTCTCAACAA 31002
 QY 3841 GTAGACACCTGATGATGAGAGCTCTCTCTCAAACTGGAGGCTCCCTGCTGCTGG 3900
 Db 31003 GTAGACACCTGATGATGAGAGCTCTCTCTCTCAAACTGGAGGCTCCCTGCTGCTGG 31062

QY 3901 AGACAAATCTTAATGCGAGGCTGGGAGTGGGTGAAGATGGAATGCTGCTAGT 3960
 Db 31063 AGACAAATCTTAATGCGAGGCTGGGAGTGGGTGAAGATGGAATGCTGCTAGT 31122
 QY 3961 GCACCACTTCAAGTACACAGAGAGTGTATGACACCACTGTGATTTAAGTCCCTG 4020
 Db 31123 GCACCACTTCAAGTACACAGAGAGTGTATGACACCACTGTGATTTAAGTCCCTG 31182
 QY 4021 TGTACAGTTATTTATGCTGTATTTAAAAACTAACACCCAGTCTGTTCCCATGGC 4080
 Db 31183 TGTACAGTTATTTATGCTGTATTTAAAAACTAACACCCAGTCTGTTCCCATGGC 31242
 QY 4081 ACTTGGTCTTCCCTGTATGATTTCTGATGAGATATTTTCAATGATGATTTACTT 4140
 Db 31243 ACTTGGTCTTCCCTGTATGATTTCTGATGAGATATTTTCAATGATGATTTACTT 31302
 QY 4141 TAATC 4145
 Db 31303 TAATC 31307

RESULT 10
 AAT10115
 ID AAT10115 standard; cDNA; 4145 BP.
 XX
 AC AAT10115:
 XX
 DT 13-MAY-1996 (first entry)
 XX
 DE Nitric oxide synthase cDNA clone pHINOS.
 XX
 KW Inducible nitric oxide synthase; iNOS; hepatocyte; gene therapy;
 KM vascular occlusive disease; cancer; infection; ds.
 OS Homo sapiens.
 XX
 OS
 FH Key Location/Qualifiers
 FT CDS 207..368
 FT /*tag= a

W09600006-A1.
 04-JAN-1996.
 XX
 PD 20-JUN-1995; 95WO-0507849.
 XX
 PR 24-JUN-1994; 94US-0265046.
 XX
 PA (VPI-) UNIV PITTSBURGH.
 XX
 PI Billiar TR, Geller DA, Nussler AK, Simmons RL, Tzeng Z;
 DR WPI; 1996-068641/07.
 DR P-PSDB; AAR88464.
 XX
 PT Inducible nitric oxide synthase gene - useful in gene therapy to
 PS treat, e.g. vascular occlusive disease and cancer
 XX
 PS Claim 72: Page 53-58; 91pp; English.

CC A cDNA clone (AAT10115), designated pHINOS, codes for the human
 CC hepatocyte inducible nitric oxide synthase (iNOS - AAR88464). It was
 CC obt. by isolating mRNA from hepatocytes induced in vitro for iNOS
 CC biosynthesis, preparing a cDNA library in a phage lambda Zap II
 CC vector, and screening with a cross-species iNOS probe. The cDNA can
 CC be used to prepare iNOS for therapeutic use. Alternatively, it is
 CC used in gene therapy strategies for treatment of vascular occlusive
 CC disease associated with atherosclerosis, vascular bypass and diabetes
 CC mellitus, tumor cell growth, and microbial infections.
 CC
 Sequence 4145 BP; 968 A; 1205 C; 1124 G; 848 T; 0 other;

Query Match 97.5%; Score 4043; DB 17; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4143; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CTGCTTAAATCTCTGGCCACCTTTGATGAGGGAGTGGGCACTTCTGACAGTCCCG 60
DB 1 CTGCTTAAATCTCTGGCCACCTTTGATGAGGGAGTGGGCACTTCTGACAGTCCCG 60

QY 61 AAGTTCGAAGCAGGCTCTCTGCTTGTGACTGTCTTACCCGGGGAGGAGTGC 120
DB 61 AAGTTCGAAGCAGGCTCTCTGCTTGTGACTGTCTTACCCGGGGAGGAGTGC 120

QY 121 AGCCAGCTGCAAGCCCACTGTAAGAACATCTAGCTCAATTCAGATAAGTACATAA 180
DB 121 AGCCAGCTGCAAGCCCACTGTAAGAACATCTAGCTCAATTCAGATAAGTACATAA 180

QY 181 GTGACCTGCTTGTAAAGCCATAGAGATGGCTCTCTTGGAAATTTCTGTCAAGACA 240
DB 181 GTGACCTGCTTGTAAAGCCATAGAGATGGCTCTCTTGGAAATTTCTGTCAAGACA 240

QY 241 AATTCACACAGTATGATGATGGGAAAAGACATCAACACATGTGAGAAACCC 300
DB 241 AATTCACACAGTATGATGATGGGAAAAGACATCAACACATGTGAGAAACCC 300

QY 301 CCTGTGCCACTCCTCAAGTTCAGACAGATGACCTTCACTATCAACCTCAGAAC 360
DB 301 CCTGTGCCACTCCTCAAGTTCAGACAGATGACCTTCACTATCAACCTCAGAAC 360

QY 361 AGCAAAATGATCCCGGAGCCCTCTGTGAGAGCGGAAAAGTTCACAAATCTCTGG 420
DB 361 AGCAAAATGATCCCGGAGCCCTCTGTGAGAGCGGAAAAGTTCACAAATCTCTGG 420

QY 421 TCAAGCTGATGCAACCCATTTGTCTCCACAGGCAATGAGATGCAAAATCTGGGCA 480
DB 421 TCAAGCTGATGCAACCCATTTGTCTCCACAGGCAATGAGATGCAAAATCTGGGCA 480

QY 481 GCGGATGACTTTCCAGACACACTTACCACTAAGGCCAAGGATTTAACTTGACGT 540
DB 481 GCGGATGACTTTCCAGACACACTTACCACTAAGGCCAAGGATTTAACTTGACGT 540

QY 541 CCAATTTCTGCTGGGGTCCATTTATGATCTCCAAAGTTTACAGAGAGCCAGGACA 600
DB 541 CCAATTTCTGCTGGGGTCCATTTATGATCTCCAAAGTTTACAGAGAGCCAGGACA 600

QY 601 AGCTTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGCAATTTGTCAACCAATATTAC 660
DB 601 AGCTTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGCAATTTGTCAACCAATATTAC 660

QY 661 GCTCCTTCAAGAGCAAAATPAGAGAACATCTGGCCAGGCTGGAAGCGGTAAACAAG 720
DB 661 GCTCCTTCAAGAGCAAAATPAGAGAACATCTGGCCAGGCTGGAAGCGGTAAACAAG 720

QY 721 AGATGAAGAACAGAGAACTACCACTAGAGGAGATGACTATCTTCCACCAAGC 780
DB 721 AGATGAAGAACAGAGAACTACCACTAGAGGAGATGACTATCTTCCACCAAGC 780

QY 781 AAGCCTGGCGCAATGCCCCAGCGTCATTTGGAGAGATCCAGTGTCCAACCTGCAAGTCT 840
DB 781 AAGCCTGGCGCAATGCCCCAGCGTCATTTGGAGAGATCCAGTGTCCAACCTGCAAGTCT 840

QY 841 TCGATGCCCCGAGCTGTTCACATGCCCCGGGAAATGTTGAACACATCTGCAGACGTC 900
DB 841 TCGATGCCCCGAGCTGTTCACATGCCCCGGGAAATGTTGAACACATCTGCAGACGTC 900

QY 901 GTTACTCAGCAACATGAGCAACATCAGTGGGCAATACGCTGTCCCGGAGGAGTG 960
DB 901 GTTACTCAGCAACATGAGCAACATCAGTGGGCAATACGCTGTCCCGGAGGAGTG 960

QY 961 ATGGCAACAGAGATCTCGGGGTGTGATGCTCAGCTCATCCGCTATGCTGACACAGA 1020
DB 961 ATGGCAACAGAGATCTCGGGGTGTGATGCTCAGCTCATCCGCTATGCTGACACAGA 1020

QY 1021 TGCCAGATGGAGCATCAGAGGGGACCTGCCAACGTGGAATTCATCAGCTGTGATCG 1080

DB 1021 TGCCAGATGGAGCATCAGAGGGGACCCGCCAACGTGGAATTCATCAGCTGTGATCG 1080

QY 1081 ACTTGGGCTGGAAGCCCAAGTACGGCCGCTTGATGTGTCCCTGCTCTGCAGGCCA 1140
DB 1081 ACTTGGGCTGGAAGCCCAAGTACGGCCGCTTGATGTGTCCCTGCTCTGCAGGCCA 1140

QY 1141 ATGGCGGTGAGCCCTGAGCTCTTGAAATCCACCTGACCTTGTGCTGAGTGGGCAATG 1200
DB 1141 ATGGCGGTGAGCCCTGAGCTCTTGAAATCCACCTGACCTTGTGCTGAGTGGGCAATG 1200

QY 1201 AACATCCCAATATGAGTGTGGAATCTGAGCTAAATGTGTAACGCTGCTGACAG 1260
DB 1201 AACATCCCAATATGAGTGTGGAATCTGAGCTAAATGTGTAACGCTGCTGACAG 1260

QY 1261 TGGCCCAACATGCTGTGAGGTGGGGGCGCTGGAAGTCCAGGGGAGCCCTCATGTGCT 1320
DB 1261 TGGCCCAACATGCTGTGAGGTGGGGGCGCTGGAAGTCCAGGGGAGCCCTCATGTGCT 1320

QY 1321 GTTACATGGGCAAGAGATCGGAGTCCGGACTCTGTGACGCTCCAGGCTACAAATCC 1380
DB 1321 GTTACATGGGCAAGAGATCGGAGTCCGGACTCTGTGACGCTCCAGGCTACAAATCC 1380

QY 1381 TGAAGGAATGGGCAAGAAATGGGCTTGAAGACGACAAAGCTGCTGCTGGAAG 1440
DB 1381 TGAAGGAATGGGCAAGAAATGGGCTTGAAGACGACAAAGCTGCTGCTGGAAG 1440

QY 1441 ACCAGGCTGCTGTGATCAACATTTGCTGTATCCATGTTTGAAGAGCAAGATGGA 1500
DB 1441 ACCAGGCTGCTGTGATCAACATTTGCTGTATCCATGTTTGAAGAGCAAGATGGA 1500

QY 1501 CCATCATGGAACACCACTGGGCTGCAAGATCTTCAATGAATGATGCAATGAATAC 1560
DB 1501 CCATCATGGAACACCACTGGGCTGCAAGATCTTCAATGAATGATGCAATGAATAC 1560

QY 1561 GGTCCGCTGGGGCTGCGGCAAGATGATGATGATGATGATGATGATGATGATGATG 1620
DB 1561 GGTCCGCTGGGGCTGCGGCAAGATGATGATGATGATGATGATGATGATGATGATG 1620

QY 1621 TCACCCCGTGTTCACACAGAGATGCTAAGCTCTGTCCTTCTTCTACTACTATC 1680
DB 1621 TCACCCCGTGTTCACACAGAGATGCTAAGCTCTGTCCTTCTTCTACTACTATC 1680

QY 1681 AGTGAAGGCTTGAAGAACCCATGCTGCGAGAGACAGAGAGGAGACCCAGAGAGAG 1740
DB 1681 AGTGAAGGCTTGAAGAACCCATGCTGCGAGAGACAGAGAGGAGAGACCCAGAGAGAG 1740

QY 1741 AGATTCATTTGAAGATCTTGGTCAAAAGCTGTGCTTGTGCTGTATGCTGATGCCAAGA 1800
DB 1741 AGATTCATTTGAAGATCTTGGTCAAAAGCTGTGCTTGTGCTGTATGCTGATGCCAAGA 1800

QY 1801 CAATGGCGTCCGAGTCAAGATCACCATCTCTTTCGACAGAGAGAGGAAATCAGAGG 1860
DB 1801 CAATGGCGTCCGAGTCAAGATCACCATCTCTTTCGACAGAGAGAGGAAATCAGAGG 1860

QY 1861 CGCTGGCTTGGGACCTTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTTGCTGCA 1920
DB 1861 CGCTGGCTTGGGACCTTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTTGCTGCA 1920

QY 1921 TGGATTAAGTACAGCTGAGCTGCTTGGAGAGGAAGGCTGCTGTTGGGTGAGACAGTA 1980
DB 1921 TGGATTAAGTACAGCTGAGCTGCTTGGAGAGGAAGGCTGCTGTTGGGTGAGACAGTA 1980

QY 1981 CGTTTGGCAATGAGAGCTGCGCTGGCAATGAGAGAAATGGAAGAAATGCTCTTCATGC 2040
DB 1981 CGTTTGGCAATGAGAGCTGCGCTGGCAATGAGAGAAATGGAAGAAATGCTCTTCATGC 2040

QY 2041 TGAAGAGCTCAACCAAAATTCAGTACGCTGTGTTGGCTCGGCTCAGCATGTACC 2100
DB 2041 TGAAGAGCTCAACCAAAATTCAGTACGCTGTGTTGGCTCGGCTCAGCATGTACC 2100

QY 2101 CTGGGTTCTGCGCTTGTGCTCATGATGATGATGATGATGATGATGATGATGATGATG 2160

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Db 2101 CTCGGTCTTGCCTTCTGCTCATGACATTCATCAGAGCTCTCCACCTGGGGGCTCTMC 2160
QY 2161 AGCTACCCCGATGGGAGAGGGGATGAGCTGAGTGGGAGAGAGAGCCCTTCCGACCT 2220
Db 2161 AGCTACCCCGATGGGAGAGGGGATGAGCTGAGTGGGAGAGAGAGCCCTTCCGACCT 2220
QY 2221 GGGCCGTGCAACCTTCAAGGAGGCTGTGAGACCTTTGATGTCGGAGGCAACAGGCA 2280
Db 2221 GGGCCGTGCAACCTTCAAGGAGGCTGTGAGACCTTTGATGTCGGAGGCAACAGGCA 2280
QY 2281 TTCAGATCCCAAGCTTACACCTTCAATGTGACCTGGGACCCGACCACTACAGGCTG 2340
Db 2281 TTCAGATCCCAAGCTTACACCTTCAATGTGACCTGGGACCCGACCACTACAGGCTG 2340
QY 2341 TGCAGAGCTCAGAGCTTGTGACCTCAGCAAAAGCCCTAGAGAGATGATGATGCAAGAG 2400
Db 2341 TGCAGAGCTCAGAGCTTGTGACCTCAGCAAAAGCCCTAGAGAGATGATGATGCAAGAG 2400
QY 2401 TGTTCACATGAGGCTCAATCTCGGAGAAATCTACAAAGTCCGACATCCAGCCGTGCA 2460
Db 2401 TGTTCACATGAGGCTCAATCTCGGAGAAATCTACAAAGTCCGACATCCAGCCGTGCA 2460
QY 2461 CCATCTGTGTGAACTCTCTGTGAGATGGCCAGAGGCTTGAAGCTTCCGAGGAGG 2520
Db 2461 CCATCTGTGTGAACTCTCTGTGAGATGGCCAGAGGCTTGAAGCTTCCGAGGAGG 2520
QY 2521 ACCTTGGGGTTTGGCCAGGCAAGCCAGCCGCTGTGTCAGAGGATCCTTGAGAGGAGTGG 2580
Db 2521 ACCTTGGGGTTTGGCCAGGCAAGCCAGCCGCTGTGTCAGAGGATCCTTGAGAGGAGTGG 2580
QY 2581 TGGATGGCCCCACACCCACAGACAGATGGCCCTGAGAGACCTGATGAGAGTGGAGCT 2640
Db 2581 TGGATGGCCCCACACCCACAGACAGATGGCCCTGAGAGACCTGATGAGAGTGGAGCT 2640
QY 2641 ACTGGGTACAGTGAAGAGGCTGCCCCCTGTCTACACAGAGGCTTCACTACTCC 2700
Db 2641 ACTGGGTACAGTGAAGAGGCTGCCCCCTGTCTACACAGAGGCTTCACTACTCC 2700
QY 2701 CGGACATACACACCCCAACCCAGCTGCTCTCAAAAGCTGGCCAGGTCGACAG 2760
Db 2701 CGGACATACACACCCCAACCCAGCTGCTCTCAAAAGCTGGCCAGGTCGACAG 2760
QY 2761 AAGGCTGAGAGACAGAGGCTGAGGCTGTGCCAGGCTCAGAGTACAGCAAGTGA 2820
Db 2761 AAGGCTGAGAGACAGAGGCTGAGGCTGTGCCAGGCTCAGAGTACAGCAAGTGA 2820
QY 2821 AGTTACCAACAGAGCCCAATTCCTGAGAGTGTAGAGAGTTCGCTCCGCTGAGGT 2880
Db 2821 AGTTACCAACAGAGCCCAATTCCTGAGAGTGTAGAGAGTTCGCTCCGCTGAGGT 2880
QY 2881 CTGCTGGCTTCTGCTTCTTCCAGCTCCCATTTCTGAAGCCCAAGTCTACTCATGAGT 2940
Db 2881 CTGCTGGCTTCTGCTTCTTCCAGCTCCCATTTCTGAAGCCCAAGTCTACTCATGAGT 2940
QY 2941 CTTCCCGGATACACAGCCCAAGAGATCCACTGACTGTGGCCGAGTCTACTACACAA 3000
Db 2941 CTTCCCGGATACACAGCCCAAGAGATCCACTGACTGTGGCCGAGTCTACTACACAA 3000
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Db 3001 CCGGAGATGAGGCTCCCTGACACAGGCTGTGACAGACATGGCTCAACAGGCTGA 3060
QY 3061 AGCCCAAGAGCCAGTGGCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3120
Db 3061 AGCCCAAGAGCCAGTGGCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3120
QY 3121 ATCCCTCCATCTTCTCATCTCATCTGAGGCTGACAGAGCATCTGAGCCCTCCGAGTT 3180
Db 3121 ATCCCTCCATCTTCTCATCTCATCTGAGGCTGACAGAGCATCTGAGCCCTCCGAGTT 3180
QY 3181 TCTGGAGAGAGGCTCTCATGACTCCACACAAAGGAGTGGGGAGGCGCCATGACT 3240
Db 3181 TCTGGAGAGAGGCTCTCATGACTCCACACAAAGGAGTGGGGAGGCGCCATGACT 3240

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QY 3241 TGTGTTTGGGTGCGCCGCCCAAGATGAGGACCATCTACAGAGGAGAGATGCTGAGA 3300
Db 3241 TGTGTTTGGGTGCGCCGCCCAAGATGAGGACCATCTACAGAGGAGAGATGCTGAGA 3300
QY 3301 TGGCCCAAGAGGGGTCTCTGATGCGGTGACACAGGCTATTCGCGCTCCGCGCAAG 3360
Db 3301 TGGCCCAAGAGGGGTCTCTGATGCGGTGACACAGGCTATTCGCGCTCCGCGCAAG 3360
QY 3361 CCAAGCTCTATGTTTCAGAGATCTCTGGGAGAGACCTGGGACGAGTGTCTGCTG 3420
Db 3361 CCAAGCTCTATGTTTCAGAGATCTCTGGGAGAGACCTGGGACGAGTGTCTGCTG 3420
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Db 3421 TCACAAAGAGGAGGCTCTATGTTTGGCGGAGATGTCGACATGGCCCGGAGAGTGG 3480
QY 3481 CCCACACCCAGAGGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3540
Db 3481 CCCACACCCAGAGGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3540
QY 3541 ACTATTTCTTTCAGCTCAGAGGCTGAGAGGCTATCAGCAAGTATCTTGGGTGCTAT 3600
Db 3541 ACTATTTCTTTCAGCTCAGAGGCTGAGAGGCTATCAGCAAGTATCTTGGGTGCTAT 3600
QY 3601 TTCTTACAGAGGCGAAGAGAGAGAGGCTGCGGTGAGCCAGCAGCTGAGATGTAG 3660
Db 3601 TTCTTACAGAGGCGAAGAGAGAGAGGCTGCGGTGAGCCAGCAGCTGAGATGTAG 3660
QY 3661 CGCTGTAGAGGCTTACAGAGGAGGCTTAAAGCTGCGGACACAACTTAAAGATGAGCA 3720
Db 3661 CGCTGTAGAGGCTTACAGAGGAGGCTTAAAGCTGCGGACACAACTTAAAGATGAGCA 3720
QY 3721 GCTCTCATTTATCTGAGCTACAGAGGCTGCGGAGATGAGAGAAATGATATCCCCAG 3780
Db 3721 GCTCTCATTTATCTGAGCTACAGAGGCTGCGGAGATGAGAGAAATGATATCCCCAG 3780
QY 3781 CTCAAGTCTTATTTCTCTCAAGCTGCTCCCATCAAGCCCTTACTGACCTCAACAA 3840
Db 3781 CTCAAGTCTTATTTCTCTCAAGCTGCTCCCATCAAGCCCTTACTGACCTCAACAA 3840
QY 3841 GTAGACCTCTGATGATGAGAGGCTCTCTCTCAAACTGGGGGCTCTGCTGCTGCTG 3900
Db 3841 GTAGACCTCTGATGATGAGAGGCTCTCTCTCAAACTGGGGGCTCTGCTGCTGCTG 3900
QY 3901 AGACAAATCTTAAATGCCAGGCTGCGAGTGGTGAAGATGGAACCTGCTGCTGAGT 3960
Db 3901 AGACAAATCTTAAATGCCAGGCTGCGAGTGGTGAAGATGGAACCTGCTGCTGAGT 3960
QY 3961 GCACCACTTCAAGTACAGCAGGAGGCTGATGCTGACACCACTGCTATTTAACTGCTG 4020
Db 3961 GCACCACTTCAAGTACAGCAGGAGGCTGATGCTGACACCACTGCTATTTAACTGCTG 4020
QY 4021 TGTACAGTTATTTATGCTCTGTATTTAAATAAATCAACCACTGCTTCCATGGCC 4080
Db 4021 TGTACAGTTATTTATGCTCTGTATTTAAATAAATCAACCACTGCTTCCATGGCC 4080
QY 4081 ACTTGGGCTTCCCTGATGATCTCTGATGAGATATTTCAATGATTTGATTTACTT 4140
Db 4081 ACTTGGGCTTCCCTGATGATCTCTGATGAGATATTTCAATGATTTGATTTACTT 4140
QY 4141 TAATC 4145
Db 4141 TAATC 4145

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RESULT 11
AA077700
ID AA077700 standard; cdna: 4164 BP.
XX AA077700;
XX
XX
DT 09-MAY-1995 (first entry)

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XX DE Nitric-oxide-synthase pBSHSINOS clone.
 XX KM Nitric-oxide-synthase; NO-synthase; NOS; chondrocyte;
 KM Interleukin-1-beta; pBSHSINOS; arthritis; hypertension;
 KM septic shock; inflammation; ischemia; dementia; obesity; tumor;
 KM agonist; antagonist; vector; CHO; Chinese hamster ovary;
 KM cell culture; ds.
 XX OS Homo sapiens.
 XX FH Key Location/Qualifiers
 FT CDS 226..3687
 FT /*tag= a
 PN W09423038-A.
 XX PD 13-OCT-1994.
 XX PF 25-MAR-1994; 94WO-GB00621.
 XX PR 26-MAR-1993; 93GB-0006386.
 XX PA (WELL) WELLCOME FOUND LTD.
 XX PI Charles IG, Moncada SE, Palmer RMD, Moncada S;
 PI WPI; 1994-333198/41.
 DR P-PSDB; AAR63206.
 XX DR
 XX PT New human inducible nitric oxide synthase - useful for
 PT identifying enzyme inhibitors and stimulators, and for diagnosis
 PT and treatment of e.g. viral infections or tumours
 PS Disclosure; Page 25-31; 42pp; English.
 XX PS
 XX XX Human chondrocytes were incubated with interleukin-1-beta to induce
 CC nitric-oxide-synthase. cDNA was generated and used to construct a
 CC library in lambda ZAPIT. This was screened with a 650 bp fragment of
 CC mouse inducible NO-synthase cDNA to identify the full-length clone
 CC pBSHSINOS. The insert was transferred to pSVL to give a vector
 CC capable of expressing NO-synthase in CHO cells under control of a
 CC heterologous constitutive promoter.
 XX CC
 SQ Sequence 4164 BP; 974 A; 1210 C; 1127 G; 853 T; 0 other;
 Query Match 84.0%; Score 3482; DB 15; Length 4164;
 Best Local Similarity 99.7%; Pred. No. 0;
 Matches 4132; Conservative 0; Mismatches 13; Indels 0; Gaps 0;
 QY 1 CTGCTTTAAATCTCTCGGCACTTTGATGAGGGGAGTGGGCACTTGTAGACAGTCCCG 60
 DB 20 GTGCTTTAAATCTCTCGGCACTTTGATGAGGGGAGTGGGCACTTGTAGACAGTCCCG 79
 QY 61 AAGTCTCAAGGCACAGTCTCTCTGTTGACTGTCTTACCCGGGAGGACAGTGC 120
 DB 80 AAGTCTCAAGGCACAGTCTCTCTGTTGACTGTCTTACCCGGGAGGAGTGC 139
 QY 121 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGAGTCAATCAGATTAAGTGAATA 180
 DB 140 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGAGTCAATCAGATTAAGTGAATA 199
 QY 181 GTGACCTGCTTTGTAAGGCATAGAGTGGCTGTCTTGGAAATTTCTGTTCAAGACA 240
 DB 200 GTGACCTGCTTTGTAAGGCATAGAGTGGCTGTCTTGGAAATTTCTGTTCAAGACA 259
 QY 241 AATTCACACAGTATGATGATGAGGAAAAAAGACATCAACAAATGTGAGAAAGCC 300
 DB 260 AATTCACACAGTATGATGAGGAAAAAAGACATCAACAAATGTGAGAAAGCC 319
 QY 301 CCTGTGCAACCTTCAGTCCAGTGAACAGAGATGACCTTCAGTATCACAACCTCAGCAAGC 360
 DB 320 CCTGTGCAACCTTCAGTCCAGTGAACAGAGATGACCTTCAGTATCACAACCTCAGCAAGC 379

QY 361 AGCAGATGAGTCCCGCAGCCCGCTGTGAGAGCGGGAAGAGTCTCCAGATCTCTGG 420
 DB 380 AGCAGATGAGTCCCGCAGCCCGCTGTGAGAGCGGGAAGAGTCTCCAGATCTCTGG 439
 QY 421 TCAACCTGAGTCAAGCCCAATGTTCTCCCGCAGGATGTGAGATCAAAAATGCGGCA 480
 DB 440 TCAACCTGAGTCAAGCCCAATGTTCTCCCGCAGGATGTGAGATCAAAAATGCGGCA 499
 QY 481 GCGGATGACTTTCCAAAGCACACTTTCACATTAAGGCCAAAGGATTTAATGCGAGT 540
 DB 500 GCGGATGACTTTCCAAAGCACACTTTCACATTAAGGCCAAAGGATTTAATGCGAGT 559
 QY 541 CCAATCTGCTGGGGGTGCTATTTAGTCTCCCAAAAGTTTGACAGAGAGCCAGGGACA 600
 DB 560 CCAATCTGCTGGGGGTGCTATTTAGTCTCCCAAAAGTTTGACAGAGAGCCAGGGACA 619
 QY 601 AGCCTACCCCTCCAGATGAGTCTTACCTCAAGCTATGCAATTTGTCAACCAATATTAC 660
 DB 620 AGCCTACCCCTCCAGATGAGTCTTACCTCAAGCTATGCAATTTGTCAACCAATATTAC 679
 QY 661 GCTCCTTCAAGAGGCAAAAATAGAGAACATCTGGCAGGGTGAACGGAAG 720
 DB 680 GCTCCTTCAAGAGGCAAAAATAGAGAACATCTGGCAGGGTGAACGGAAG 739
 QY 721 AGATGAAACCAACAGAACTTCAACATGACGAGATGAGTCTATTTGGCCACCAAGC 780
 DB 740 AGATGAAACCAACAGAACTTCAACATGACGAGATGAGTCTATTTGGCCACCAAGC 799
 QY 781 AGGCTTGGGCGCAATGCCACGCTCATTTGGAGGATTCAGTGTCAACCTGCGAGGCT 840
 DB 800 AGGCTTGGGCGCAATGCCACGCTCATTTGGAGGATTCAGTGTCAACCTGCGAGGCT 859
 QY 841 TCGATGCCGCGAGCTGTTCTCACTGCGCGGGAATTTGAAACATCTGCAAGACGCTGC 900
 DB 860 TCGATGCCGCGAGCTGTTCTCACTGCGCGGGAATTTGAAACATCTGCAAGACGCTGC 919
 QY 901 GTTACTCCACCAACATGAGTCAATCAGTGGGCAATCAGCTGTTCGCCAGCGGATG 960
 DB 920 GTTACTCCACCAACATGAGTCAATCAGTGGGCAATCAGCTGTTCGCCAGCGGATG 979
 QY 961 ATGGCAGACGAGTCCCGGCTGTGGAATGCTCAGTCTATCCGCTATGCTGCTACAGA 1020
 DB 980 ATGGCAGACGAGTCCCGGCTGTGGAATGCTCAGTCTATCCGCTATGCTGCTACAGA 1039
 QY 1021 TGGCAGATGGCAGATCAGAGGGGACCTTGCACAGTGAATTCATCAGCTGTGCATCG 1080
 DB 1040 TGGCAGATGGCAGATCAGAGGGGACCTTGCACAGTGAATTCATCAGCTGTGCATCG 1099
 QY 1081 ACCTGGGCTGGAAGCCCAAGTACGGCGCTTGAGTGTGTTCCCGTGTGCGAGGCCA 1140
 DB 1100 ACCTGGGCTGGAAGCCCAAGTACGGCGCTTGAGTGTGTTCCCGTGTGCGAGGCCA 1159
 QY 1141 ATGGCGGTGACCTTGAGCTTTTGAATCCACCTGACCTTGTGTTGAGTGGCCATG 1200
 DB 1160 ATGGCGGTGACCTTGAGCTTTTGAATCCACCTGACCTTGTGTTGAGTGGCCATG 1219
 QY 1201 AACATCCCAATATGAGTGTTCGGAAGTGAAGTAAAGTGAAGTGAAGTGAAGTGAAG 1260
 DB 1220 AACATCCCAATATGAGTGTTCGGAAGTGAAGTAAAGTGAAGTGAAGTGAAGTGAAG 1279
 QY 1261 TGGCCAAACATGCTGTGAGTGGGCGCTGTGAGTGTTCAGAGTGTCCCTTCAATGAGT 1320
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 QY 1321 GGTATATGGGACAGAGATCGAGTCCGGGACTTGTGACGTCACGCGCTACACATTC 1380
 DB 1340 GGTATATGGGACAGAGATCGAGTCCGGGACTTGTGACGTCACGCGCTACACATTC 1399
 QY 1381 TGGAGGAAGTGGGACAGAGATGGGCTGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 1440
 DB 1400 TGGAGGAAGTGGGACAGAGATGGGCTGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 1459

1441 ACCAGGCTGTCTGTGATCAACATTTGTCATGATCCATAGTTTTCAGAGCAGAAATGTA 1500
1460 ACCAGGCTGTCTGTGATCAACATTTGTCATGATCCATAGTTTTCAGAGCAGAAATGTA 1519
1501 CCATTCATGACCAACCACTGCGTGCAGAAATCCTTCATGTAATGATGCAAGATGAATACC 1560
1520 CCATTCATGACCAACCACTGCGTGCAGAAATCCTTCATGTAATGATGCAAGATGAATACC 1579
1561 GGCCCGGTGGGGGCTCCCGGAGACGTGATTTGGCTGGTCCCTCCATGTGGGAGCA 1620
1580 GGCCCGGTGGGGGCTCCCGGAGACGTGATTTGGCTGGTCCCTCCATGTGGGAGCA 1639
1621 TCACCCCGTGTTCACGAGAGATGCTGACAGTCCCTGTCCTTCCTACTACTATC 1680
1640 TCACCCCGTGTTCACGAGAGATGCTGACAGTCCCTGTCCTTCCTACTACTATC 1699
1681 AGGTACAGGCTGGAAACCCCATGTGTGCGAGAGAGAGAGGAGAGAGAGAGAGAGAG 1740
1700 AGGTACAGGCTGGAAACCCCATGTGTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1759
1741 AGATTCATTTGAAAGCTGTGTCAAAGCTGTGCTCTTGTGTCGTGATGGCGAAGA 1800
1760 AGATTCATTTGAAAGCTGTGTCAAAGCTGTGCTCTTGTGTCGTGATGGCGAAGA 1819
1801 CAATGGCGTCCGAGTCAAGATCACCATCTCTTTGCGACAGAGACAGGAAATCAGAGG 1860
1820 CAATGGCGTCCGAGTCAAGATCACCATCTCTTTGCGACAGAGACAGGAAATCAGAGG 1879
1861 CGCTGGCGTGGGACCTGGGGGGCTTATAGCTGTGCTTCAACCCCAAGTTGTCTGA 1920
1880 CGCTGGCGTGGGACCTGGGGGGCTTATAGCTGTGCTTCAACCCCAAGTTGTCTGA 1939
1921 TGGATAGTACAGAGCTGACCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
1940 TGGATAGTACAGAGCTGACCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1999
1981 CGTTTGGCAATGAGACTGCTCCCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAG 2040
2000 CGTTTGGCAATGAGACTGCTCCCTGGCAATGAGAGAGAGAGAGAGAGAGAGAGAGAG 2059
2041 TGAAGAGTCAACAAATTCAGGTACGTGTGTTGGCTGGGCTCCAGCATGTACC 2100
2060 TGAAGAGTCAACAAATTCAGGTACGTGTGTTGGCTGGGCTCCAGCATGTACC 2119
2101 CTGCGTTTGCAGCTTTGCTCATGACATTTGATCAGAAAGCTGTCACCTGGGGCTCTC 2160
2120 CTGCGTTTGCAGCTTTGCTCATGACATTTGATCAGAAAGCTGTCACCTGGGGCTCTC 2179
2161 AGCTACACCCCGATGGAG 2220
2180 AGCTACACCCCGATGGAG 2239
2221 GGCCCGTGGCAACCTTCAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2280
2240 GGCCCGTGGCAACCTTCAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2299
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2401 TGTTCACATGAGAGCTCAATCTCGGAGAGATCTCAAAAGTCCGAGATCCAGCCCTGCCA 2460
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2461 CCATCTGTGTGAAGCTCTCTGTGAGAGATGGCAAAGCCCTGAATCTGCGGGGAGAGC 2520
2480 CCATCTGTGTGAAGCTCTCTGTGAGAGATGGCAAAGCCCTGAATCTGCGGGGAGAGC 2539
2521 ACCTTGGGGTTTGGCCAGGCAACAGCCGCGCTGTCCAGAGCATCTGGAGCGAGTGG 2580

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2600 TGGATGGCCCAACCCCAACAG 2659
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2660 ACTGGGTAGTGAAG 2719
2701 CGGACATACCAACCCCAACAG 2760
2720 TGGACATACCAACCCCAACAG 2779
2761 AAGAGCTGAGAGACAG 2820
2780 AAGAGCTGAGAGACAG 2839
2821 AGTTCACCAACAGCCCAACATTCCTGGAGAGTCTAGAGAGAGTCCGCTCGGGGTGT 2880
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2941 CCTCCCGGATACACAGCCCAACAGAGATCCACTGACTGTGGCCGTGATCCTTACCACA 3000
2960 CCTCCCGGATACACAGCCCAACAGAGATCCACTGACTGTGGCCGTGATCCTTACCACA 3019
3001 CCGGAGATGGCGAGAGTCCCTGACACAGGTCTGACAGACATGGCTCAACAGCCTGA 3060
3020 CCGGAGATGGCGAGAGTCCCTGACACAGGTCTGACACAGGTCTGACAGACATGGCTCAACAGCCTGA 3079
3061 AGCCCAAGAGCCAGTGCCTTGTGTGGGAAATGACAGAGAGAGAGAGAGAGAGAGAGAGAG 3120
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3140 ATCCCTCCCATCTTGTGATCTCTCATGCGGGCTGGACAGAGATGTCCTTCCGAGTT 3199
3181 TCTGGAGCAAGAGGCTCCATGACTCCAGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3240
3200 TCTGGAGCAAGAGGCTCCATGACTCCAGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3259
3241 TGTGTGTTGGGTGCGCGCGCCAGATGAGAGACATCTACAGAGAGAGAGATCTGGAGA 3300
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3301 TGGCCCAAGAGAGGAGTGTGATGCGGTGACACAGAGCTATTCGCGCTCCGTCGGGCAAGC 3360
3320 TGGCCCAAGAGAGGAGTGTGATGCGGTGACACAGAGCTATTCGCGCTCCGTCGGGCAAGC 3379
3361 CCAAGGTCTATGTTCAAGAGATCTTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3420
3380 CCAAGGTCTATGTTCAAGAGATCTTGGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3439
3440 TCCACAG 3499
3421 TCCACAG 3480
3441 TCCACAG 3500
3481 CCAAG 3540
3500 CCAAG 3559
3541 ACTATTTCTTTCAGAGCTCAAG 3600
3560 ACTATTTCTTTCAGAGCTCAAG 3619
3601 TTCTTACAG 3660

QY 671 AGAGCAAAATAGAGACATCTGSCAGAGGTGAAGCGGTAAACAAGAGATAGAAC 730
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Db 661 AGAGCAAAATAGAGACATCTGSCAGAGGTGAAGCGGTAAACAAGAGATAGAAC 720
QY 731 AACAGAACCTTACCACTGACGGAGATGAGTCACTCTTCCGCCAAGCAGGCGTGGCG 790
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Db 721 AACAGAACCTTACCACTGACGGAGATGAGTCACTCTTCCGCCAAGCAGGCGTGGCG 780
QY 791 CAATGCCCAAGCTGATGGAGGATGCAAGTGTCCAACTGACAGTCTGATGCCG 850
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Db 781 CAATGCCCAAGCTGATGGAGGATGCAAGTGTCCAACTGACAGTCTGATGCCG 840
QY 851 CAGCTGTTCCACTGCCCCGGAATTTTGAACACATCTGAGACAGAGTGGCTTACTCCAC 910
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Db 841 CAGCTGTTCCACTGCCCCGGAATTTTGAACACATCTGAGACAGAGTGGCTTACTCCAC 900
QY 911 CAACAATGSCAATCAGTGGCCATCACCGTGTTCGCCAGCGGAGTGAAGCA 970
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Db 901 CAACAATGSCAATCAGTGGCCATCACCGTGTTCGCCAGCGGAGTGAAGCA 960
QY 971 CCACTTCGGGAGTGAATGCTCAGTCACTCCGCTATGCTGGGTACCAGATGCCAATGG 1030
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QY 1151 CCCTGAGCTTCCGAATCCACCTGATGCTTGAAGTGGATGGAATGCCAA 1210
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Db 1141 CCCTGAGCTTCCGAATCCACCTGATGCTTGAAGTGGATGGAATGCCAA 1200
QY 1211 AATAGATGTTTGGGAACTGAGGCTAAAGTGTACGCGCTCCCTGCACTGGCCAACT 1270
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Db 1201 AATAGATGTTTGGGAACTGAGGCTAAAGTGTGTAGCGCTCCCTGCACTGGCCAACT 1260
QY 1271 GCTGCTTGAAGTGGGCGCTGAGATCCAGAGGTGCCCTTAATGGCTGTGATCATGG 1330
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QY 1331 CACAGAGATGAGTCCGGGACTTCTGTGAGTCCAGCGGTACAACTCCTGGAGAGT 1390
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QY 1391 GGGCAGAGATGGGCTGGAACGCAAGCTGGGCTCGCTGGAAGACAGGCTGT 1450
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Db 1381 GGGCAGAGATGGGCTGGAACGCAAGCTGGGCTCGCTGGAAGACAGGCTGT 1440
QY 1451 CGTTGAGATCAACATTTGCTGTGATCCATGATTTTCAAGACAGAGTGAACATCATGA 1510
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QY 1751 GAAAGCTTGGTCAAGAGCTGTGCTTGGCTGTATGCTATGCTGCAAGCAATGGCGTC 1810
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QY 1811 CCGAGTCCAGAGTCAACATCTCTTTGGACAGAGACAGAAATCAGAGGCGCTGGCCTG 1870
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Db 1801 CCGAGTCCAGAGTCAACATCTCTTTGGACAGAGACAGAAATCAGAGGCGCTGGCCTG 1860
QY 1871 GGAAGTGGGGGCTTATTCAGTGTGCTTCAACCCCAAGGTTGTGCTGATGAATGA 1930
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Db 1861 GGAAGTGGGGGCTTATTCAGTGTGCTTCAACCCCAAGGTTGTGCTGATGAATGA 1920
QY 1931 CAGGCTGAGTGCCTGGAGAGAGAACGCTGCTTGTGTGTAGCAATGATGCTTGGCAA 1990
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Db 1921 CAGGCTGAGTGCCTGGAGAGAGAACGCTGCTTGTGTGTAGCAATGATGCTTGGCAA 1980
QY 1991 TGAAGAGTCCCTTGGCAATGAGAGAACTGAAGAAATGCTTCACTGTAAGAGCT 2050
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QY 2051 CAACAACAAATGAGGATGAGTGTGCTTGGCTGCGGCTCCAGCATGATGCTGGTCTG 2110
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QY 2111 CGCCTTGTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2170
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Db 2101 CGCCTTGTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2160
QY 2171 GATGGAGAGAGGAGATGAGTCAAGTGGGCGAGAGAGACGCTTCCGAGCTGGGCGTGA 2230
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Db 2161 GATGGAGAGAGGAGATGAGTCAAGTGGGCGAGAGAGACGCTTCCGAGCTGGGCGTGA 2220
QY 2231 AACCTTCAAGGAGGCTGTGAGAGCTTGTGATGTCGAGGAGCAACAGCATTCAGATCC 2290
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QY 2291 CAAGCTTACACCTCCCAATGATGATGATGATGATGATGATGATGATGATGATGATG 2350
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Db 2821 CAGCCACATCTCTGGAGGTGCTAGAGAGTTCCGTCCTCGGGTGTCTCTGGCTT 2880
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Db 2941 TCACAGCCACGAGAGATCCACTGATGTGGCCGTGTACCTACACACCGAGATG 3000
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Db 3061 CCCAGTCCCTGCTTTGTGGGAGATCCAGCGCTTCACACTCCCGAGAGATCCCTCCA 3120
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Db 3301 GGGGGGTCGTCAGTCCGCTGACACAGCTATTCCTCCCTGCTGCGACGCCAGAGTCTA 3360
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Db 3361 TGTTCAGGACATCTCTGCGACAGAGCTGCGACAGGAGTGTCCGTTCTGACAGGA 3420
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Db 3421 GCCAGGCCACCTCTATGTTTGGGGGATGTGCGCATGCGCCGGAGCGGCCACACCT 3480
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Db 3481 GAAGCAGCTGTGGCTGCGCAAGCTGAAATGTAATGAGAGGACAGTGTGAGATATTCTT 3540
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Db 3541 TCAGCTCAAGAGCCAGAAAGCTATACAGAAATATCTTCGCTGATTTCTTACGA 3600
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Db 3601 GCGGAAGAGAGAGGCTGCGGTGCGAGCCAGACGCTGAGATGTGAGCCTCTGAG 3660
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Db 3661 GCGTACAGAGAGGTTAAAGTGTGCGGACAGAACTTAAGATGAGCCAGTCTGCAAT 3720
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Db 3721 AATCTGAGTTCACAGGCGCTGGGAGATGGAGAAAGTATATCCCGACCTCAAGTCTT 3780
QY 3791 AATTTCTCAAGCTGTCTCCCATCAAGCCCTTTACTGACCTCTTACAGAGTACACCT 3850
Db 3781 AATTTCTCAAGCTGTCTCCCATCAAGCCCTTTACTGACCTCTTACAGAGTACACCT 3840
QY 3851 GGATTGATGGAGGCTGCTCTCAACTGAGGCGCTCCCTGCTTGGAGACAAATC 3910
Db 3841 GGATTGATGGAGGCTGCTCTCAACTGAGGCGCTCCCTGCTTGGAGACAAATC 3900
QY 3911 TTAATGCCAGGCTGGGAGTGGTGAAGATGAACTTCTGTGTGATGATCACCACCTTC 3970

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Db 3901 TTAATGCCAGGCGCGCGAGTGGGTGAAGATGAACTTCTGTGATGACACACTTC 3960
QY 3971 AAGTGACCAACGAGAGGTGCTATGCGACCACTGTGTATTTACTGTCTGTACAGTTA 4030
Db 3961 AATTGACCAACGAGAGGTGCTATGCGACCACTGTGTATTTACTGTGTACAGTTA 4020
QY 4031 TTTATGCTCTGTATTTAAAAAACAACCAACCACTGTGTCCCATGAGCC 4080
Db 4021 TTTATGCTCTGTATTTAAAAAACAACCAACCACTGTGTCCCATGAGCC 4070

RESULT 13
AA08434
AA08434 standard; DNA; 4062 BP.
AA08434:
28-JUN-1999 (first entry)
Inducible nitric oxide synthase gene.
Manganese containing superoxide dismutase; MnSOD; IDDM;
diabetes mellitus; treatment; therapy; nitric oxide; NO; beta cell;
fatty acids; lipotoxic; cytotoxic; cytokine; osteoporosis;
inflammatory disease; autoimmune disease; neurodegenerative disease;
ss.
Homo sapiens.
Key Location/Qualifiers
CDS 106..3567
/*tag= a
/*product= "Nitric oxide synthase"

W0906059-A2.
11-FEB-1999.
30-JUL-1998; 98MO-US15781.
03-MAR-1998; 98US-0055092.
30-JUL-1997; 97US-0055092.
(BETA-) BETA GENE INC.
(TEXA) UNIV TEXAS SYSTEM.
Clark SA, Hohmeier H, Koyama K, Lee Y, Newgard CB;
Ohneda M, Shimabukuro M, Thigpen A, Unger RH;
WPI; 1999-153448/13.
P-PSDB; AAW96322.
Protection of mammalian cells against immunotoxicity or lipotoxicity
- used for treating, e.g. diabetes, obesity, wasting syndromes,
osteoporosis, inflammatory diseases, autoimmune diseases or
neurodegenerative diseases
Disclosure: Page 244-247; 253pp; English.

Inhibition of cytokine mediated immunotoxicity of cells can be
achieved by blocking free radical production or the accumulation of
free radicals in that cell. Treatment of insulin dependent diabetes
mellitus (IDDM) can be achieved by by blocking nitric oxide (NO)
production in a pancreatic beta cell and by providing a composition
comprising an agent that reduces levels of fatty acids in the cells
and protects beta-cells of the subject against lipid-mediated cell
death. Cells can also be protected against nitric oxide mediated
cytotoxicity by introducing into the cell an antioxidant agent.
The methods can be used for protecting cells against immunotoxicity
mediated by, e.g. IL-1 beta, IL-1 alpha, gamma IFN, TNF alpha, TNF
beta, IL-8, IL-2, IL-6, IL-2, IL-3, IL-5, IL-7, IL-9, IL-14, IL-17,
granulocyte-macrophage colony stimulating factor or monocyte
chemoattractant protein-1. The methods can be used for the treatment

```


XX Human; Influenza virus; antisense; inducible nitric oxide synthase;
 KW iNOS; ds.
 XX OS Homo sapiens.
 XX WO200078946-A2.
 XX PD 28-DEC-2000.
 XX PF 19-JUN-2000; 2000WO-US16810.
 XX PR 17-JUN-1999; 99US-0139479.
 XX PA (EVIR-) EASTERN VIRGINIA MEDICAL SCHOOL.
 XX PI Keller ET, Gravenstein S, Hall DM;
 XX WPI; 2001-102720/11.
 XX
 XX Treating viral influenza with antisense oligonucleotides that hybridize
 PT with inducible nitric oxide synthase mRNA and inhibit synthesis of the
 PT enzyme, reducing the production of nitric oxide in lungs
 XX
 XX Disclosure; Fig 2; 21pp; English.
 XX
 XX The present invention provides a novel method of treating influenza virus
 CC infection by administering an antisense oligonucleotide directed at the
 CC human inducible nitric oxide synthase (iNOS) mRNA. This is useful in
 CC preventing the symptoms of influenza infection.
 XX
 XX Sequence 4150 BP; 968 A; 1211 C; 1125 G; 846 T; 0 other;
 SQ
 Query Match 81.0%; Score 3357; DB 22; Length 4150;
 Best Local Similarity 99.6%; Pred. No. 0;
 Matches 4107; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

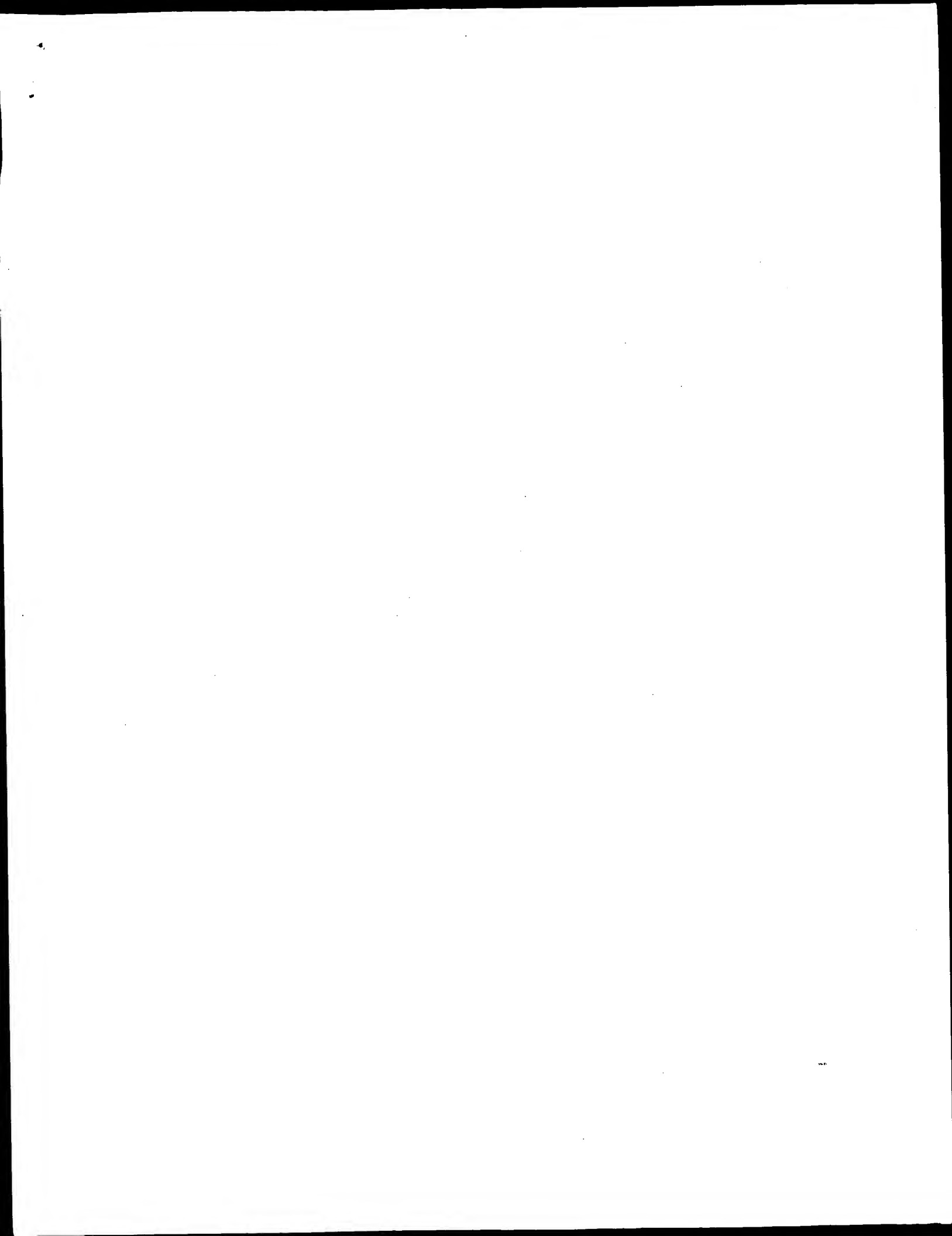
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 Db 569 CCAATCTGCTGGGCTCCATTATGACGCCAAAAGTTGACGAGAGACCCAGGACA 628
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 Db 689 GCTCTTCAAGAGCCAAAATAGAGAAATCTGGCCAGGGTGGAGCCGGTAACAAGG 748
 QY 721 AGATGAACACACAGAACCTTACCACTGACGGGAGATGAGCTATCTTCCGCAACAG 780
 Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 749 AGATGAACACACAGAACCTTACCACTGACGGGAGATGAGCTATCTTCCGCAACAG 808
 QY 781 AGGCTGGGCAATGACCCGACGCTCATTTGGAGAGATGACGAGGTCACCAAGCCGAGGCT 840
 Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 809 AGGCTGGGCAATGACCCGACGCTCATTTGGAGAGATGACGAGGTCACCAAGCCGAGGCT 868
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 Db 869 TCGATGCCCCGACGCTTCCACTGCGCCGGAATGTTGAACACATTCGACAGACGTCG 928
 QY 901 GTTACGCCACCAACATGCGCAATCAGATGCGCATACCGGTGTTCCCGGCGAGTG 960
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Dp	1141	CGGACCTTCTGTGACGCTCCAGGCGCTACAACTTCCTTGAGAGAACTGGGAGAAATGGGC	1200
Oy	1407	CTGGAAGACACAAAGCTGGCTTCGCTCTGGAAAGACAGGCTGTGCTTGAATCAACTT	1466
Dp	1201	CTGGAAACGACAAAGCTGGGCGCTCGCTCTGGAAAGACAGGCTGTGCTTGAATCAACTT	1260
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Dp	1261	GCTGTGCTCCATAGTTTCCGAAAGACGAATGTACCATATATGACACACACTCGGCTGCA	1320
Oy	1527	GAATCTCTTACGAATGATACAGCAATGAAATACCGGTCCCGTGGGGGCTGCCCGGACAC	1586
Dp	1321	GAATCTCTTACGAATGATACAGCAATGAAATACCGGTCCCGTGGGGGCTGCCCGGACAC	1380
Oy	1587	TGGATTTGGCGGTGGTCCCTCCCATAGTCGTGGAGATACCCCGGTGTTTACACAGAGATG	1646
Dp	1381	TGGATTTGGCGGTGGTCCCTCCCATAGTCGTGGAGATACCCCGGTGTTTACACAGAGATG	1440
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Dp	1441	CTGAACTACGCTGCTGTCCTCTTCTACTACTATACAGTATAGAGCCCTGGAAACCCTATC	1500
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Dp	1501	TGGCAGGACCGAAGGCGGAAACCCAGAGAGAGAGATTCATTGAAAGTCTTGTCTAA	1560
Oy	1767	GCTGTGCTCTTGGCTGTATGCTGATGCGCAACAACTAGGCTCCCGAGTCAAGTACAC	1826
Dp	1561	GCTGTGCTCTTGGCTGTATGCTGATGCGCAACAACTAGGCTCCCGAGTCAAGTACAC	1620
Oy	1827	ATCTCTCTTTCGACACAGACACAGAAATACAGAGCGGCTGGCTGGACCTGGGGGCTTA	1886
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Db	2461	CCCTGTCTACTCACACCGGCGCTCAGCTACTCTCTGGATCTGGAGATCACCACACCCCAACACAG	2520
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Db	2521	CTGTGCTCTCCAAAAGGCTGTGCGCCAGTGGGCCACAGAAAGCCTTGAGAGACAGAGGCTGGAG	2580
QY	2787	GGCCGTGGCCAGCGCCTCAGAGTACACAGTCAAGTGAAGTTACCAAGGCCCAACATTCCTG	2846
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Db 3901 TGATGAGATATTTACATGATGATTTTACTTTATC 3939
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Search completed: March 14, 2003, 13:36:11
Job time : 1119 secs



APPLICANT: Chenault, Ruth A

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: APPLICANT: Meagher, Madeleine Joy
: TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
: TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
: FILE REFERENCE: 210121.561
: CURRENT APPLICATION NUMBER: US/09/998,598
: CURRENT FILING DATE: 2001-11-16
: NUMBER OF SEQ ID NOS: 2606
: SOFTWARE: CoriXa Invention Disclosure Database
: SEQ ID NO 1831
: LENGTH: 256
: TYPE: DNA
: ORGANISM: Homo sapiens
US-09-998-598-1831

Query Match          6.0%; Score 248; DB 10; Length 256;
Best Local Similarity 100.0%; Pred. No. 6.8e-118;
Matches 248; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2995 ACCGACACC 3002
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Db 16 ACCGACACC 9

RESULT 2
US-09-864-761-10947/c
: Sequence 10947, Application US/09864761
: Patent No. US20020048763A1
: GENERAL INFORMATION:
: APPLICANT: Penn, Sharon G.
: APPLICANT: Rank, David R.
: APPLICANT: Hanzel, David K.
: APPLICANT: Chen, Wensheng
: TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
: TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
: FILE REFERENCE: Aeomica-X-1
: CURRENT APPLICATION NUMBER: US/09/864,761
: CURRENT FILING DATE: 2001-05-23
: PRIOR APPLICATION NUMBER: US 60/180,312
: PRIOR FILING DATE: 2000-02-04
: PRIOR APPLICATION NUMBER: US 60/207,456
: PRIOR FILING DATE: 2000-05-26
: PRIOR APPLICATION NUMBER: US 09/632,366
: PRIOR FILING DATE: 2000-08-03
: PRIOR APPLICATION NUMBER: GB 24263.6
: PRIOR FILING DATE: 2000-10-04
: PRIOR APPLICATION NUMBER: US 60/236,359
: PRIOR FILING DATE: 2000-09-27
: PRIOR APPLICATION NUMBER: PCT/US01/00666
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00667
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00664
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00669
: PRIOR FILING DATE: 2001-01-30
: PRIOR APPLICATION NUMBER: PCT/US01/00665
: PRIOR FILING DATE: 2001-01-30

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PRIORITY APPLICATION NUMBER: PCT/US01/00668
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00663
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00662
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00661
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00660
PRIORITY FILING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: US 60/234,667
PRIORITY FILING DATE: 2000-09-21
PRIORITY APPLICATION NUMBER: US 09/608,408
PRIORITY FILING DATE: 2000-06-30
PRIORITY APPLICATION NUMBER: US 09/774,203
PRIORITY FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 10947
LENGTH: 479
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC005697.1
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.84
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.92
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.99
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.79
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.95
US-09-864-761-10947

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Query March 4.4% Score 184; DB 10; Length 479;
Best Local Similarity 100.0%; Pred. No. 1e-84;
Matches 184; Conservative 0; Mismatches 0; Indels 0; Gaps

OY 133 GCCCCACAGTGAAGACATCTGAGCTCAATTCAGATAAGTGACATAGCTGCTT 1922
Db 479 GCCCAGCAGTGAAGACATCTGAGCTCAATTCAGATAAGTGACATAGCTGCTT 420
OY 193 GTAAAGCCATGACATGGCCCTGCTCTGGAAATTTCTGTCAAGAACCAATTCACAGT 252
Db 419 GTAAAGCCATGAGATGGCCCTGCTCTGGAAATTTCTGTCAAGAACCAATTCACAGT 360
OY 253 ATGCATATGAATGGGGAAGAAAGACATCAACAACATCTGAGAAAGCCCTGTGCCACT 312
Db 359 ATGCATATGAATGGGGAAGAAAGACATCAACAACATCTGAGAAAGCCCTGTGCCACT 300
OY 313 CCAG 316
Db 299 CCAG 296

RESULT 3
US-09-998-598-1881/C
; Sequence 1881, Application US/09998598
; Patent No. US20020150922A1
; GENERAL INFORMATION:
; APPLICANT: Stolk, John A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Chenault, Ruth A.
; APPLICANT: Meagher, Madelein Joy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121 561
; CURRENT APPLICATION NUMBER: US/09/998,598
; CURRENT FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 2606
; SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 1881
; LENGTH: 174
; TYPE: DNA
; ORGANISM: Homo sapiens

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[illegible]

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      RESULT 4
      US-09-864-761-22316/c
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      : Patent No. US20020048763A1
      :
      : GENERAL INFORMATION:
      :
      : APPLICANT: Penn, Sharon G.
      : APPLICANT: Rank, David R.
      : APPLICANT: Hanzel, David K.
      : APPLICANT: Chen, Wensheng
      :
      : TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
      :
      : TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
      :
      : FILE REFERENCE: Aeomica-X-1
      :
      : CURRENT APPLICATION NUMBER: US/09/864,761
      :
      : CURRENT FILING DATE: 2001-05-23
      :
      : PRIOR APPLICATION NUMBER: US 60/180,312
      :
      : PRIOR FILING DATE: 2000-02-04
      :
      : PRIOR APPLICATION NUMBER: US 60/207,456
      :
      : PRIOR FILING DATE: 2000-05-26
      :
      : PRIOR APPLICATION NUMBER: US 09/632,366
      :
      : PRIOR FILING DATE: 2000-08-03
      :
      : PRIOR APPLICATION NUMBER: GB 24263.6
      :
      : PRIOR FILING DATE: 2000-10-04
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      : PRIOR APPLICATION NUMBER: US 60/236,359
      :
      : PRIOR FILING DATE: 2000-09-27
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      : PRIOR APPLICATION NUMBER: PCT/US01/00666
      :
      : PRIOR FILING DATE: 2001-01-30
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      : PRIOR APPLICATION NUMBER: PCT/US01/00667
      :
      : PRIOR FILING DATE: 2001-01-30
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      : PRIOR APPLICATION NUMBER: PCT/US01/00664
      :
      : PRIOR FILING DATE: 2001-01-30
      :
      : PRIOR APPLICATION NUMBER: PCT/US01/00669
      :
      : PRIOR FILING DATE: 2001-01-30
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      : PRIOR APPLICATION NUMBER: PCT/US01/00665
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      : PRIOR FILING DATE: 2001-01-30
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      : PRIOR APPLICATION NUMBER: PCT/US01/00668
      :
      : PRIOR FILING DATE: 2001-01-30
      :
      : PRIOR APPLICATION NUMBER: PCT/US01/00663
      :
      : PRIOR FILING DATE: 2001-01-30
      :
      : PRIOR APPLICATION NUMBER: PCT/US01/00662
      :
      : PRIOR FILING DATE: 2001-01-30
      :
      : PRIOR APPLICATION NUMBER: PCT/US01/00661
      :
      : PRIOR FILING DATE: 2001-01-30
      :
      : PRIOR APPLICATION NUMBER: PCT/US01/00670
      :
      : PRIOR FILING DATE: 2001-01-30
      :
      : PRIOR APPLICATION NUMBER: US 60/234,687
      :
      : PRIOR FILING DATE: 2000-09-21
      :
      : PRIOR APPLICATION NUMBER: US 09/608,408
      :
      : PRIOR FILING DATE: 2000-06-30
      :
      : PRIOR APPLICATION NUMBER: US 09/774,203
      :
      : PRIOR FILING DATE: 2001-01-29
      :
      : NUMBER OF SEQ ID NOS: 49117
      :
      : SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
      :
      : SEQ ID NO 22316
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      : LENGTH: 250

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TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC005697.1
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 4.9
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 4.6
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 4.5
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 4.2
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 4.3
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 3.7
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 4.2
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 4.6
OTHER INFORMATION: NT HIT: X85764.1, EVALUATE 1.00e-127
OTHER INFORMATION: SWISSPROT HIT: O62699, EVALUATE 2.00e-26
US-09-864-761-22316

Query Match
Best Local Similarity 100.0%; Score 165; DB 10; Length 250;
Matches 165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 674 GCGAAATATAGAGACATCTGGCCAGGTTGAAGCGGTAAAGAGATAGAAACAC 733
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DB 250 GCGAAATATAGAGACATCTGGCCAGGTTGAAGCGGTAAAGAGATAGAAACAC 191
QY 734 AGAACCCTACCACTGACGGAGATGAGCTTCCTGCCACCAAGCAGGCTGGCGCAA 793
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DB 190 AGAACCCTACCACTGACGGAGATGAGCTTCCTGCCACCAAGCAGGCTGGCGCAA 131
QY 794 TGCCCCACGCTGATGGAGATCCAGTGTCCACCTGCAGGT 838
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DB 130 TGCCCCACGCTGATGGAGATCCAGTGTCCACCTGCAGGT 86

RESULT 5
US-09-864-761-5546/c
; Sequence 5546, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; FILE REFERENCE: Aeomica-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annotmax Sequence Listing Engine vers. 1.1
; SEQ ID NO 5546
; LENGTH: 483
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC005697.1
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 4.9
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 4.6
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 4.5
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 4.2
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 4.3
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 3.7
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 4.2
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 4.6
US-09-864-761-5546

Query Match
Best Local Similarity 100.0%; Score 165; DB 10; Length 483;
Matches 165; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 479 GCGAAATATAGAGACATCTGGCCAGGTTGAAGCGGTAAAGAGATAGAAACAC 420
QY 734 AGAACCCTACCACTGACGGAGATGAGCTTCCTGCCACCAAGCAGGCTGGCGCAA 793
|||||
DB 419 AGAACCCTACCACTGACGGAGATGAGCTTCCTGCCACCAAGCAGGCTGGCGCAA 360
QY 794 TGCCCCACGCTGATGGAGATCCAGTGTCCACCTGCAGGT 838
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DB 359 TGCCCCACGCTGATGGAGATCCAGTGTCCACCTGCAGGT 315

RESULT 6
US-09-864-761-27584/c
; Sequence 27584, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; FILE REFERENCE: Aeomica-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30

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; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 27584
; LENGTH: 92
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC005697.1
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 0.84
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.92
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.99
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.1
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.79
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.95
; OTHER INFORMATION: EST_HUMAN HIT: BE999973.1, EVALUO 2.00e-23
; OTHER INFORMATION: SWISSPROT HIT: P35228, EVALUO 3.00e-13
; OTHER INFORMATION: NT HIT: AB022318.1, EVALUO 5.00e-45
US-09-864-761-27584

Query Match      2.2%; Score 92; DB 10; Length 92;
Best Local Similarity 100.0%; Pred. No. 3.9e-37;
Matches 92; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 92 ATGGCTGCTTGGAAATTTCTGTCAGACCAATTCACAGATGCAATGAATGG 33
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QY 267 GAAAAAGACATCAACACATGTGGAAGC 298
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 High quality sequence stop: 471.
 Location/Qualifiers

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 /tissue_type="colon tumor, RER+"
 /lab_host="DH10B"
 /note="Organ: Colon; Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site: 1; Not 1; Site: 2; Eco RI; Plasmid DNA from the normalized library NCI CGAP Col6 was prepared, and ss circles were made in vitro. Following HAP hybridization reaction, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (cloneids 1057416-1061255, and 1144584-1145351). Subtraction by Bento Soares and M. Fatima Bonaldo."
 BASE COUNT 179 a 186 c 183 g 172 t 1 others
 ORIGIN

Query Match 12.4%; Score 513; DB 9; Length 721;
 Best Local Similarity 99.7%; Pred. No. 1.2e-242;
 Matches 613; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3531 CAGGTGAGGACATATTTCTTTCAGCTCAAGAGCCGATATCAGCAAGATCTTC 3590
 DB 615 CAGGTGAGGACATATTTCTTTCAGCTCAAGAGCCGATATCAGCAAGATCTTC 556
 QY 3591 GGTCTGATATTTCTTTCAGGAGCGAAGAGACAGGTGGTGACCCACAGCCTG 3650
 DB 555 GGTCTGATATTTCTTTCAGGAGCGAAGAGACAGGTGGTGACCCACAGCCTG 496
 QY 3651 GAGATGTCAGCGCTCTGAGGAGCTACAGAGGGGTTAAAGCTCCGGCACAGACTTAAG 3710
 DB 495 GAGATGTCAGCGCTCTGAGGAGCTACAGAGGGGTTAAAGCTCCGGCACAGACTTAAG 436
 QY 3711 GATGAGCCGAGCTCTGATATCTGAGTCAAGAGGCTGGGAGATGAGGAAGTGTAT 3770
 DB 435 GATGAGCCGAGCTCTGATATCTGAGTCAAGAGGCTGGGAGATGAGGAAGTGTAT 376
 QY 3771 ATCCCGAGGCTCAAGTCTATTTCTCAAGCTTGCTCCCATCAAGCCCTTACTTGAC 3830
 DB 375 ATCCCGAGGCTCAAGTCTATTTCTCAAGCTTGCTCCCATCAAGCCCTTACTTGAC 316
 QY 3831 CTCTTAACAAGTAGACACCTGATGATGAGAGCTCTCTCAAACTGGGCTCCCT 3890
 DB 315 CTCTTAACAAGTAGACACCTGATGATGAGAGCTCTCTCAAACTGGGCTCCCT 256
 QY 3891 GGTCCCTTGGAGCAAAATCTTAAATGCCAGGCTGGGCTGGGAGAAATGGAAGT 3950
 DB 255 GGTCCCTTGGAGCAAAATCTTAAATGCCAGGCTGGGAGAAATGGAAGT 196
 QY 3951 GTTCTGAGTGCACACACTTCAAGTAGACACAGAGGTGCTATCGACCACTGTGATT 4010
 DB 195 GTTCTGAGTGCACACACTTCAAGTAGACACAGAGGTGCTATCGACCACTGTGATT 136
 QY 4011 AACTGCTTGTGACATATTTATGCTGTGATTTTAAAAAACTAACACCCAGTCTGT 4070
 DB 135 AACTGCTTGTGACATATTTATGCTGTGATTTTAAAAAACTAACACCCAGTCTGT 76
 QY 4071 CCCATGCGCACTGGTCTTCCCTGATGATTCCTTGATGAGAGATATTNATGATTG 4130
 DB 75 CCCATGCGCACTGGTCTTCCCTGATGATTCCTTGATGAGAGATATTNATGATTG 16
 QY 4131 CATTTACTTTAATC 4145
 DB 15 CATTTACTTTAATC 1

RESULT 2
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 LOCUS
 DEFINITION
 w474902.x1 NCI CGAP GC6 Homo sapiens cDNA clone IMAGE:2474450 3'
 similar to gp:K73029 NITRIC OXIDE SYNTHASE, INDUCIBLE (HUMAN);,
 mRNA sequence.

ACCESSION
 VERSION
 KEYWORDS
 SOURCE
 ORGANISM

human.
 Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 1 (bases 1 to 470)

REFERENCE
 AUTHORS
 TITLE
 JOURNAL
 COMMENT

NCI CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
 National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
 Tumor Gene Index
 Unpublished (1997)
 Contact: Robert Strausberg, Ph.D.
 Email: cga@bbs-remail.nih.gov
 Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michael
 R. Emmert-Buck, M.D., Ph.D.
 cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima
 Bonaldo, Ph.D.
 cDNA Library Arrayed by: Greg Lennon, Ph.D.
 DNA Sequencing by: Washington University Genome Sequencing Center
 Clone distribution: NCI CGAP clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
 www.bio.lnl.gov/bdip/image/image.html
 Seq primer: -40UP from Gibco.
 Location/Qualifiers

FEATURES

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 /db_xref="taxon:9606"
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 /tissue_type="pooled germ cell tumors"
 /lab_host="DH10B"
 /note="Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site: 1; Not 1; Site: 2; Eco RI; Plasmid DNA from the normalized library NCI CGAP GC6 was prepared, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (cloneids 1257096-1258631, 1469064-1470983, and 1475592-1476743). Subtraction by Bento Soares and M. Fatima Bonaldo."
 BASE COUNT 128 a 107 c 121 g 114 t
 ORIGIN

Query Match 10.1%; Score 417; DB 9; Length 470;
 Best Local Similarity 99.8%; Pred. No. 4.5e-195;
 Matches 467; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3678 GGAGGGGTTAAAGCTGCGGACAGAACTTAAGATGAGGACCTGCTATATCTGAG 3737
 DB 470 GGAGGGGTTAAAGCTGCGGACAGAACTTAAGATGAGGACCTGCTATATCTGAG 411
 QY 3738 GTCAAGAGGCGCTGGGGAAGTGAAGATATCCCCACGCTCAAGTCTATTTCT 3797
 DB 410 GTCAAGAGGCGCTGGGGAAGTGAAGATATCCCCACGCTCAAGTCTATTTCT 351
 QY 3798 CAAGCTGCTCCCTCAAGGCTTACTTGAACCTCAAGAGAGACCCCTGGATTGA 3857
 DB 350 CAAGCTGCTCCCTCAAGGCTTACTTGAACCTCAAGAGAGACCCCTGGATTGA 291
 QY 3858 TCGAGCCTCTCTCTCAAACTGGGCGCTCCCTGCTGGAGAGAAAATCTTAATG 3917
 DB 290 TCGAGCCTCTCTCTCAAACTGGGCGCTCCCTGCTGGAGAGAAAATCTTAATG 231
 QY 3918 CCAGGCTGGGAGTGGTGAAAGATGGAACCTGCTGAGTGACACCACTTCAAGTGAC 3977
 DB 230 CCAGGCTGGGAGTGGTGAAAGATGGAACCTGCTGAGTGACACCACTTCAAGTGAC 171

QY	3978	CACCGAGGAGTCCTATCCACACACAGTGTATTAACTGCCTGGTAGAGTTATTATGC	4037
Dd	170	CACCAGGAGGTCCTATCCACACACTGTGTATTAACTGCCTGGTAGAGTTATTATGC	111
OY	4038	CTCTGTATTAAAAAACAATACACCAGCAGTCTGTCCCATGGGCCACTTGAGTCTCCCTGT	4097
Dd	110	CTCTGTATTAAAAAACAATACACCAGCAGTCTGTCCCATGGGCCACTTGAGTCTCCCTGT	51
OY	4098	ATGATTCCTTGATGGAGATATTTTACATGAATTTGCATTTTACTTATATC	4145
Dd	50	ATGATTCCTTGATGGAGATATTTTACATGAATTTGCATTTTACTTATATC	3
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DEFINITION	AI991263	453 bp	mRNA
DESCRIPTION	w41f10.x1 Soares_Dieckgrafe.colon_NHDD Homo sapiens cDNA clone IMAGE:2522635.3' similar to gb:X73029 NITRIC OXIDE SYNTHASE, INDUCIBLE (HUMAN);, mRNA sequence.		
ACCESSION	AI991263		
VERSION	AI991263.1	GI:5838168	
KEYWORDS	EST.		
SOURCE	Homo sapiens		
ORGANISM	human.		
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo. 1 (bases 1 to 453)		
AUTHORS	NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.		
TITLE	National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index		
JOURNAL	Unpublished (1997)		
COMMENT	Contact: Robert Strausberg, Ph.D. Email: cgapds-f@mail.nih.gov This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (infoimage.llnl.gov) for further information. Insert length: 576 Std Error: 0.00 Seq primer: -40UP from GlbcO. Location/Qualifiers 1..453		
FEATURES			
SOURCE			

Df	393	GGGAGATBGGAGGAAGAATGATATATCCGCCACGCTCAAGTATTATTTCTCATAAGCTTGCTTC	334
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Df	333	CCATCAAGCCCTTTACTTGACCTCTCTAACAAGTAGCACACCCTGATGTGATCGAGGCCTCT	274
OY	3870	CCTCAAACTGGGGGCGCTCCCTGTGCTCCCTTGGAGACAAAATCTTAATGCGAGGCTGGCG	3929
Df	273	CTCTCAAACTGGGGGCGCTCCCTGTGCTCCCTTGGAGACAAAATCTTAATGCGAGGCTGGCA	214
OY	3930	AGTGGGTAAAAATGAGCACTTCCTGCTAGTACACACACTTCAAGTACACACAGAGAGGTG	3989
Df	213	AGTGGGTGAAATATGGAATCTGCTCTGATGACACACTTCAAGTACACACAGAGAGGTG	154
OY	3990	CTATGCAACCACTGTGTATTAACTGCCTTGTGTACAGTATTATTAATGCTCTGTATTAA	4049
Df	153	CTATGCAACCACTGTGTATTAACTGCCTTGTGTACAGTATTATTAATGCTCTGTATTAA	94
OY	4050	AAACTAACACCACTGTGTATCCCATAGGCGACCTTGGGCTTCCTCTGATATGATTCCTTGA	4109
Df	93	AAACTAACACCACTGTGTATCCCATAGGCGACCTTGGGCTTCCTCTGATATGATTCCTTGA	34
OY	4110	TGAGATATTATACATGATGATTTGATTTACTTTA	4142
Df	33	TGAGATATTATACATGATGATTTGATTTACTTTA	1
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LOCUS	A1652686	455 bp	mRNA linear EST 17-DEC-1999
DEFINITION	wb30f01.x1 NCI CGAP GC6 Homo sapiens cDNA clone IMAGE:2307193 3'		
	similar to gb:x73029 NITRIC OXIDE SYNTHASE, INDUCIBLE (HUMAN)),,		
	mRNA sequence.		
ACCESSION	A1652686		
VERSION	A1652686.1 GI:4736665		
KEYWORDS	EST.		
SOURCE	Homo sapiens		
ORGANISM	human.		
	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
	Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.		
REFERENCE	1 (bases 1 to 455)		
AUTHORS	NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.		
JOURNAL	National Cancer Institute, Cancer Genome Anatomy Project (CCAP),		
COMMENT	Unpublished (1997)		
	Contact: Robert Strausberg, Ph.D.		
	Email: cgapbs-femail.nih.gov		
	Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michael		
	R. Emmerit-Buck, M.D., Ph.D.		
	cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima		
	Borralho, Ph.D.		
	cDNA Library Arrayed by: Greg Lennon, Ph.D.		
	DNA Sequencing by: Washington University Genome Sequencing Center		
	Clone distribution: NCI-CGAP clone distribution information can be		
	found through the I.M.A.G.E. Consortium/JMNL at:		
	www-bio.lnl.gov/bdrrp/image/image.html		
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	Seq primer: -40Up from Glenco.		
FEATURES	Location/Qualifiers		
SOURCE	I..455		

[illegible]

Korea Research Institute of Bioscience & Biotechnology
52 Eoeun-dong, Yuseong-gu, Daejeon 305-333, South Korea
Tel: +82-42-860-4470
Fax: +82-42-860-4409
Email: yongsung@mail.kr.ibm.re.kr
Plate: 49 row: B column: 07
High quality sequence stop: 391.

FEATURES

source

1. 391
Location/Qualifiers

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/clone_1ib="S20T65307"
/sex="M"
/lab_host="Top10F"
/note="Organ: Stomach; Vector: pcns; Site: 1: EcoRI; Site: 2: NotI; The poly (A)+ RNA was dephosphorylated with bacterial alkaline phosphatase (BAP) and then decapped with tobacco acid pyrophosphatase (TAP). The decapped intact mRNA was ligated with DNA-RNA linker including EcoRI I site by treatment of T4 RNA ligase and the first strand cDNA was synthesized from oligo dt-selected mRNA by priming with dt-tailed vector. The dt-tailed vector was adjusted to have about 60nt. The cDNA vector was circularized with E. coli DNA ligase after digestion of EcoRI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli Top10F by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library."

BASE COUNT 70 a 126 c 125 g 70 t

Query Match

Best Local Similarity 100.0%; Pred. No. 7.4e-161; Length 391;
Matches 348; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3167 GCCCTCCGACGTTCTGGCAGCAAGGCTCCATCTCCAGCAAGGAGTGGGGG 3226
Db 44 GCCCTCCGACGTTCTGGCAGCAAGGCTCCATCTCCAGCAAGGAGTGGGGG 103
QY 3227 AGCCCGCATGACCTGTTGGTGGTGGCCGCCAGATGAGACACATCTACACGA 3286
Db 104 AGCCCGCATGACCTGTTGGTGGTGGCCGCCAGATGAGACACATCTACACGA 163
QY 3287 GGAGATGCTGAGATGGCCAGAGGGGTGCTGATCGGTGCGACAGAGCTATCCCG 3346
Db 164 GGAGATGCTGAGATGGCCAGAGGGGTGCTGATCGGTGCGACAGAGCTATCCCG 223
QY 3347 CCTGCTGGCAGCAAGGCTGATGTTAGAGACATCTCTGGCAGCAGCTGGCCAGCA 3406
Db 224 CCTGCTGGCAGCAAGGCTGATGTTAGAGACATCTCTGGCAGCAGCTGGCCAGCA 283
QY 3407 GGTGCTGGTGGTGGCAGAGGAGCCAGCCACTCTATGTTGGGGATGTGGCAT 3466
Db 284 GGTGCTGGTGGTGGCAGAGGAGCCAGCCACTCTATGTTGGGGATGTGGCAT 343
QY 3467 GGCCCGGAGCTGGCCAGCAGCTGAGACAGCTGGTGGCTCCCAAGCT 3514
Db 344 GGCCCGGAGCTGGCCAGCAGCAGCTGAGACAGCTGGTGGCTCCCAAGCT 391

RESULT 7
AM297448/c 414 bp mRNA linear EST 16-JAN-2000
LOCUS AM297448
DEFINITION UI-H-BW0-ais-f-03-0-UI-s1 NCI CGAP_Sub6 Homo sapiens cDNA clone
IMAGE:2730388 3', mRNA sequence.
ACCESSION AM297448
VERSION AM297448.1 GI:6704084
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens

REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgaabs-remail.nih.gov
The sequence contained an oligo-dt track that was present in the oligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a Bonalde poly A tail. cDNA library preparation: M.B. Soares Lab Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/ILM at: www.bio.lnl.gov/bdrp/image/image.html
Seq primer: M13 Forward
POLY-A-yes

FEATURES

source

1. 414
Location/Qualifiers

/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:2730388"
/clone_1ib="NCI CGAP Sub6"
/lab_host="DH10B (Life Technologies)"
/note="Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site: 1: Not I; Site: 2: Eco RI; NCI CGAP Sub6 is a subtracted library derived from BW, which consists of a mixture of four normalized libraries: NCI CGAP Brn50, NCI CGAP Lnl3, NCI CGAP Ovl8, GBC1. The NCI CGAP Sub6 library had 7 million recombinants. A single-stranded DNA preparation of BW was used as a tracer in a subtractive hybridization with a driver comprising the IMAGE pool (NCI CGAP Kid3 pool 1 LLM 3334-3337, 3682-3683, 3798-3803 (IMAGE Clonoids 1322376-1323911, 1456008-1456775, 1500552-1502855); NCI CGAP Kid5 pool 1 LLM 3338-3342, 3722-3725, 3776-3778 (IMAGE Clonoids 1323912-1325831, 1471368-1472903, 1492104-1493255); NCI CGAP Lnl5 pool 1 LLM 3575-3582, 3851-3854 (IMAGE Clonoids 1414920-1417991, 1502904-1522439); NCI CGAP GC4 pool 1 LLM 3164-3167, 3716-3720, 3733-3735 (IMAGE Clonoids 1257096-1258631, 1469064-1470983, 1475592-1476743); NCI CGAP Pr22 pool 1 LLM 2457-2459, 2758-2759, 3062-3068 (IMAGE Clonoids 985608-986759, 1101192-1101959, 1217928-1220615); NCI CGAP Co10 pool 1 LLM 2644-2653, 2871-2872 (IMAGE Clonoids 1057416-1061255, 1144584-1145351). (50% of the driver population), plus a pool of 3,840 arrayed clones from NCI CGAP Sub1 (IMAGE Clonoids 2710536-2712455) and NCI CGAP Sub2 (IMAGE Clonoids 2710536-2712455) (20% of the driver population), plus a pool of 11,136 clones from NCI CGAP Sub3 (IMAGE Clonoids 2712456-2723591) (30% of the driver population).
Subtraction was performed as previously described [Bonalde, Lennon & Soares (1996): Normalization and Subtraction: Two Approaches To Facilitate Gene Discovery. Genome Research 6, 791-806.
TAG LIB=NCI CGAP_Ov18
TAG_TISSUE=ovary
TAG_SEQ=GCCACA

BASE COUNT 115 a 83 c 105 g 111 t

Query Match

Best Local Similarity 99.7%; Pred. No. 7.3e-160; Length 414;
Matches 396; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3749 TGGGAGATGAGAGAAAGATATCCCAAGCTCTATTCTCCAGAGTTGGTC 3808
Db 414 TGGGAGATGAGAGAAAGATATCCCAAGCTCTATTCTCCAGAGTTGGTC 355
QY 3809 CCCATCAAGCCCTTCTGACCTCTAACAAGTAGACCTTGATGTCGAGACCTCC 3868
Db 354 CCCATCAAGCCCTTCTGACCTCTAACAAGTAGACCTTGATGTCGAGACCTCC 295

Query Match 8.3%; Score 344; DB 10; Length 516;
 Best Local Similarity 99.7%; Pred. No. 7.6e-159;
 Matches 394; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 3869 TCTCTCAAACTGGGGCCCTCCCTGCTCCCTGGAGACAAATCTTAATGCGAGCCCTGGC 3928
 294 TCTCTCAAACTGGGGCCCTCCCTGCTCCCTGGAGACAAATCTTAATGCGAGCCCTGGC 235
 Oy 3929 GAGTGGGGAAGAAGATGAACTGGCTGAGTGGAGCCACTTCAAGTGCACCGAGAGGT 3988
 234 AAGTGGGGAAGAAGATGAACTGGCTGAGTGGAGCCACTTCAAGTGCACCGAGAGGT 175
 Oy 3989 GCTATCGACACCACTGCTGATTTAACTGCTGCTGTACAGTTATTTATGCTCTGTATTTA 4048
 174 GCTATCGACACCACTGCTGATTTAACTGCTGCTGTACAGTTATTTATGCTCTGTATTTA 115
 Oy 4049 AAAAATCAACACCCAGCTGTCTTCCCATGGCCACTGGGCTTCCCTGATGATTCCTTG 4108
 114 AAAAATCAACACCCAGCTGTCTTCCCATGGCCACTGGGCTTCCCTGATGATTCCTTG 55
 Oy 4109 ATGAGATTTTACATGATGATTCATTTACTTTATTC 4145
 54 ATGAGATTTTACATGATGATTCATTTACTTTATTC 18

RESULT 8
 AM236981/c 516 bp mRNA linear EST 13-DEC-1999
 LOCUS xms1f11.x1 NCI CGAP GC6 Homo sapiens cDNA clone IMAGE:2687757 3'
 DEFINITION similar to gb:X73025 NITRIC OXIDE SYNTHASE, INDUCIBLE (HUMAN);,
 mRNA sequence.

ACCESSION AM236981
 VERSION AM236981.1 GI:6569370
 KEYWORDS EST.
 SOURCE human.
 ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 516)
 AUTHORS NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
 TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
 Tumor Gene Index
 JOURNAL Unpublished (1997)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgaaps-r@mail.nih.gov
 Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michael
 R. Emmert-Buck, M.D., Ph.D.
 cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima
 Bonaldo, Ph.D.
 cDNA Library Arrayed by: Greg Lennon, Ph.D.
 DNA Sequencing by: Washington University Genome Sequencing Center
 Clone distribution: NCI-CGAP clone distribution information can be
 found through the I.M.A.G.E. Consortium/LNL at:
 www.bio.lnl.gov/bbrp/image/image.html
 Seg primer: -400p from Gibco
 High quality sequence stop: 331.

FEATURES

source

Location/Qualifiers

1..516
 /organism="Homo sapiens"
 /db_xref="taxon:9606"
 /clone="IMAGE:2687757"
 /clone.lib="NCI CGAP GC6"
 /tissue-type="pooled germ cell tumors"
 /lab_host="DH10B"
 /note="Vector: p773D-Pac (Pharmacia) with a modified
 polylinker; Site_1: Not I; Site_2: Eco RI; Plasmid DNA
 from the normalized library NCI-CGAP GC4 was prepared, and
 ss circles were made in vitro. Following HAP purification,
 this DNA was used as tracer in a subtractive hybridization
 reaction. The driver was PCR-amplified cDNAs from a pool
 of 5,000 clones made from the same library (cloneIDs
 1257096-1258631, 1469064-1470983, and 1475592-1476743).
 Subtraction by Bento Soares and M. Fatima Bonaldo."

BASE COUNT

139 a 122 c 131 g 124 t

Query Match 8.3%; Score 344; DB 10; Length 516;
 Best Local Similarity 99.7%; Pred. No. 7.6e-159;
 Matches 394; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 3725 TGCATATCTGAGGTGACAGGGCTGGGAGATGAGAGAAAGTATTCCTCCACCTCA 3784
 423 TGCATATCTGAGGTGACAGGGCTGGGAGATGAGAGAAAGTATTCCTCCACCTCA 364
 Oy 3785 AGCTTATTTCCCTCAAGTGGTCCCATCAAGCCCTTACTTGACCTCAACAGTAG 3844
 363 AGCTTATTTCCCTCAAGTGGTCCCATCAAGCCCTTACTTGACCTCAACAGTAG 304
 Db 3845 CACCTCGATTTGATCGAGAGCTCTCTCAACCTGGGCTCCCTGCTTGGAGAC 3904
 303 CACCTCGATTTGATCGAGAGCTCTCTCTCAACCTGGGCTCCCTGCTTGGAGAC 244
 Oy 3905 AAAATCTTAATGCGCAGGCTGGCGAGTGGTGAAGAATGGAACCTGCTGAGTGCAC 3964
 243 AAAATCTTAATGCGCAGGCTGGCGAGTGGTGAAGAATGGAACCTGCTGAGTGCAC 184
 Db 3965 CACTTCAAGTGCACAGGAGGCTGCTATCGACACCACTGTATTTAACTGCTGTGTA 4024
 183 CACTTCAAGTGCACAGGAGGCTGCTATCGACACCACTGTATTTAACTGCTGTGTA 124
 Oy 4025 CAGTTATTTATGCTCTGTATTTAAAAAATAACCCAGCTCTTCCCATGGCCTT 4084
 123 CAGTTATTTATGCTCTGTATTTAAAAAATAACCCAGCTCTTCCCATGGCCTT 64
 Oy 4085 GCGTCTTCCCTGATGATTCCTTGGATGAGATATT 4119
 63 GCGTCTTCCCTGATGATTCCTTGGATGAGATATT 29

RESULT 9
 BF375262 513 bp mRNA linear EST 24-NOV-2000
 LOCUS OYO-ST0215-061299-065-h11 ST0215 Homo sapiens cDNA, mRNA sequence.
 DEFINITION BF375262
 ACCESSION BF375262.1 GI:11337287
 VERSION BF375262.1 GI:11337287
 KEYWORDS EST.
 SOURCE human.
 ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 513)
 AUTHORS Dias Neto E., Garcia Correa R., Verjovski-Almeida S., Briones M.R.,
 Nagai M.A., da Silva M. Jr., Zago M.A., Bordin S., Costa F.F.,
 Goldman G.H., Carvalho A.F., Matsukuma A., Bala G.S., Simpson D.H.,
 Brunstein A., de Oliveira P.S., Bucher P., Jongeneel C.V., O'Hare
 M.J., Soares F., Brentani R.R., Reis L.F., de Souza S.J. and
 Simpson A.J.

TITLE Shotgun sequencing of the human transcriptome with ORF expressed
 sequence tags
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
 MEDLINE 20202663
 COMMENT Contact: Simpson A.J.G.
 Laboratory of Cancer Genetics
 Ludwig Institute for Cancer Research
 Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
 Brazil
 Tel: +55-11-2704922
 Fax: +55-11-2707001
 Email: asimpson@ludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome
 Project. This entry can be seen in the following URL
 (http://www.ludwig.org.br/scripts/gethtml2.pl?l=OYO&t2=OYO-ST0215-
 061299-065-h11&t3=1999-12-06&t4=1)
 Seq primer: puc 18 forward
 High quality sequence stop: 33
 High quality sequence stop: 51.
 Location/Qualifiers

FEATURES

source

1..513
 /organism="Homo sapiens"

Query Match	8.28;	Score 339;	DB 12;	Length 513;
Best Local Similarity	99.78;	Pred. No. 2.3e-156;		
Matches 389;	Conservative 0;	Mismatches 1;	Indels 0;	Gaps 0

QY	3407	GGTCTCTCGGTGTGCTCCACAAAGGAGCGGCCACCCCTATATGTTTGCGGGAGTGTCCGAT	3466
Db	76	GGTGTCTCCGTGTGTCTCCACAAAGGAGCGGCCACCCCTATATGTTTGCGGGAGTGTCCGAT	135
QY	3467	GGCCCCGGGAGCGTGGCCACACCCCTGAAGACAGCTGGGTGGTCCCAAGCGAAATTGAATGA	3520
Db	136	GGCCCCGGGAGCGTGGCCACACCCCTGAAGACAGCTGGGTGGTCCCAAGCTGAATTGAATGA	195
QY	3527	GGAGCAGCTGGAGGACTATTTCTTTACGCTCAAGAGCCAGAAAGCCATTCACGAAGATAT	3586
Db	196	GGAGCAGCTGGAGGACTATTTCTTTACGCTCAAGAGCCAGAAAGCCATTCACGAAGATAT	255
QY	3587	CTTCGGGTCTGTATTTCTTACGAGGCCAAGAAAGCAGAGGTGGCGGTGCACGCCACGAC	3646
Db	256	CTTTGGTGTCTGTATTTCTTACGAGGCCAAGAAAGCAGAGGTGGCGGTGCACGCCACGAC	315
QY	3647	CGTGGAGATGTACGCCCTTGAGAGGCGCTACAGAGAGGCTTAAAGCTGCGCGGACACGAAT	3706
Db	316	CGTGGAGATGTACGCCCTTGAGAGGCGCTACAGAGAGGCTTAAAGCTGCGCGGACACGAAT	375
QY	3707	TAAAGATGGAAGCCAGCTCTGCATTATCTGAGGTTCACAGGCCCTGGGAGATGAGAGAAAG	3766
Db	376	TAAAGATGGAAGCCAGCTCTGCATTATCTGAGGTTCACAGGCCCTGGGAGATGAGAGAAAG	435
QY	3767	TGATATCCCCCAGCCCTCAAGCTCTATATTC	3796
Db	436	TGATATCCCCCAGCCCTCAAGCTCTATATTC	465

RESULT 10	AM950935	621 bp	mRNA	linear	EST 01-JUN-2000
LOCUS	AM950935				
DEFINITION	EST163005	MAGE resequences,	MAGA Homo sapiens	cDNA,	mRNA sequence.
ACCESSION	AM950935				
VERSION	AM950935.1	GI:8140599			
KEYWORDS	EST.				
SOURCE	human.				
ORGANISM	Homo sapiens				
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
AUTHORS	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
	1 (bases 1 to 621)				
	Hedde,P., Qi,R., Abernathy,K., Dharap,S., Gaspard,R., Gay,C., Holt				
	,I.E., Saeed,A.I., Sharov,V., Lee,N.H., Yeatman,T.J. and				
	Quackenbush,J.				
TITLE	Assessment of gene expression patterns in a model of colon tumor				
JOURNAL	metastasis using a 19,200 element cDNA microarray				
COMMENT	Unpublished (2000)				
	Contact: John Quackenbush				
	The Institute for Genomic Research				
	9712 Medical Center Dr., Rockville, MD 20850, USA				
	Tel: 301 838 3528				
	Fax: 301 838 0208				
	Email: johnq@tigr.org				
	Plate: 21				
	Seq primer: Reverse.				
FEATURES	Location/Qualifiers				

Query Match	7.38;	Score 301;	DB 10;	length 621;
Best Local Similarity	100.08;	Pred. No. 1.7e-137;		
Matches 301;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

QY	2702	GGACATCAACACACCCCAACCCAGCGTGTCTCCAAAAGCTGTGGCCAGTGGCCACAGA	2761
Db	79	GGACATCAACACACCCCAACCCAGCTGTCTCTCCAAAAGCTGTGGCCAGTGGCCACAGA	138
QY	2762	AGAGCGCTGAGACAGAGGCTGGAAGGCCCTGTGTCCAGCCGCTCAGATACAGCAAGTGAA	2821
Db	139	AGAGCGCTGAGAGACAGAGGCTGTGGAGGCCCTGTGTCCAGCCCTCAGATACAGCAAGTGAA	198
QY	2822	GTTGACCAACACAGCCCACTTCCGTGGAGGTGTAGAGGAATTCGCTGCGTGGGTGC	2881
Db	199	GTTGACCAACACAGCCCACTTCTCGAGGTGTCTAGAGGAATTCGCTGCGTGGGTGC	258
QY	2882	TGCTGTGCTTCTGCTTTTCCAGCTGCCCATTTGGAAGCCGAGTTTCTACTCATCAGCTC	2941
Db	259	TGCTGTGCTTCTGCTTTTCCAGCTGCCCATTTGGAAGCCGAGTTTCTACTCATCAGCTC	318
QY	2942	CTCCCGGAGATACACAGCCCAAGAGATTCACACCTGCATGTGGCGGTGTACCTTACCACAC	3001
Db	319	CTCCCGGAGATACACAGCCCAAGAGATTCACACCTGCATGTGGCGGTGTACCTTACCACAC	378
QY	3002	C 3002	
Db	379	C 379	

RESULT 11					
AM445097/C					
LOCUS					
DEFINITION	UT-H-B13-9akd-e-12-0-UT-s1 NC1.CGAP_Sub5 Homo sapiens CDNA clone	364 bp	mRNA	linear	EST 17-FEB-2000
ACCESSION	AM445097				
VERSION	AM445097.1				
KEYWORDS	EST.				
SOURCE	human.				

REFERENCE	AUTHORS	TITLE	JOURNAL	COMMENT
	Eukariyota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	1 (bases 1 to 364)		
	NCI-CGAP	http://www.ncbi.nlm.nih.gov/ncicgap.		
	National Cancer Institute, Cancer Genome Anatomy Project (CGAP),			
	Tumor Gene Index			
	Unpublished (1997)			
	Contact: Robert Strausberg, Ph.D.			
	Email: cgapbs-r@mail.nih.gov			
	The sequence contained an oligo-dT track that was present in the			
	oligonucleotide that was used to prime the synthesis of first			
	strand cDNA and therefore this may represent a bonafide poly A			
	tail. cDNA library Preparation: M. B. Soares lab Clone distribution:			
	NCI-CGAP clone distribution information can be found through the			
	I.M.A.G.E. Consortium/ILNI at:			
	www.bio.liln1.gov/bdip/image/image.html			
	Seq primer: M13 Forward			
	POLYA-Yes.			

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FEATURES
source
location/Qualifiers
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/db_xref="taxon:9606"
/clone="IMAGE:2733815"
/clone_1lb="NCI CGAP Sub5"
/lab_host="DH10B (Life Technologies)"
/note="Vector: pT73d-Pac (Pharmacia) with a modified

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Oy 3864 CCTCCTCTCTCAAACTGGGGCCCTCCCTGTCCTTGAGACAAATCTTAATGCCAGC 3923
Db 295 CCTCCTCTCTCAAACTGGGGCCCTCCCTGTCCTTGAGACAAATCTTAATGCCAGC 236
Oy 3924 CTGGGAGTGGGTGAAGATGGAACCTGCTGCTGAGTGCACCACTTCAAGTACCAGC 3983
Db 235 CTGGCAAGTGGGTGAAGATGGAACCTGCTGCTGAGTGCACCACTTCAAGTACCAGC 176
Oy 3984 GAGGCGCTATGCGACCACTGATGATTTACGTCCTGCTGATGATTTATGCTCTGT 4043
Db 175 GAGGCGCTATGCGACCACTGATGATTTACGTCCTGCTGATGATTTATGCTCTGT 116
Oy 4044 ATTTAAAAAATAACACCCAGCTGCTGTCCTGATGCGCACTGGGCTCCCTGATGAT 4103
Db 115 ATTTAAAAAATAACACCCAGCTGCTGTCCTGATGCGCACTGGGCTCCCTGATGAT 56
Oy 4104 CCTGATGAGATATTTATGATGATTTGATTTACTTTAA 4143
Db 55 CCTGATGAGATATTTATGATGATTTGATTTACTTTAA 16

RESULT 13
AM391328 541 bp mRNA linear EST 04-FEB-2000
LOCUS QV0-ST0215-061299-065-f03 ST0215 Homo sapiens cDNA, mRNA sequence.
ACCESSION AM391328
VERSION AM391328.1 GI:6896091
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS 1 (bases 1 to 541)
HCGP http://www.ludwig.org.br/ORESRES.
TITLE The FAPESP/LICR Human Cancer Genome Project
JOURNAL Unpublished (1999)
COMMENT Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?cl=QV0&f2=QV0-ST0215-
061299-065-f03&f3=1999-12-06&f4=1)
Seq primer: puc 18 forward
High quality sequence start: 68
High quality sequence stop: 541.
Location/Qualifiers
source
1. 541
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_1ib="ST0215"
/dev_stage="Adult"
/note="Organ: stomach; Vector: puc18; Site: 1. Smal;
Site: 2. Smal; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the puc 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
low stringency conditions."
BASE COUNT 127 a 139 c 155 g 120 t
ORIGIN
Query Match 6.5%; Score 269; DB 10; Length 541;
Best Local Similarity 99.3%; Pred. No. 1,2e-121;
Matches 419; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 3407 GGTCCTCGTGTGCTCCACAGAGAGCCAGCCACTTATGTTTGGCGGATGTCGCAT 3466

```

```

Db 92 GGTGCTCCGTGTGCTCCACAGAGAGCCAGCCACTCTATGTTTGGGGATGTCGCAT 151
Oy 3467 GGCCCGGAGCTGGCCACACCCCGAAGCAGTGTGGTGGCCCAACTGAAATTTGATCA 3526
Db 152 TGCCCGGAGCTGGCCACACCCCGAAGCAGTGTGGTGGCCCAACTGAAATTTGATCA 211
Oy 3527 GGAACAGTGGAGACTATTTCTTTCAGCTCAAGAGCCAGAAAGCGCTATCAGCAATAT 3586
Db 212 GGAACAGTGGAGACTATTTCTTTCAGCTCAAGAGCCAGAAAGCGCTATCAGCAATAT 271
Oy 3587 CTTCGGGCTGATTTTCTTTCAGAGGCGAAGAGACAGGTGGCGTCCAGCCAGCAG 3646
Db 272 CTTCGGGCTGATTTTCTTTCAGAGGCGAAGAGACAGGTGGCGTCCAGCCAGCAG 331
Oy 3647 CCTGAGATGTCAGCCCTGAGGCGCTGAGGAGGCTTAAAGCTGCCGCGACGAAT 3706
Db 332 CTGAGATGTCAGCCCTGAGGCGCTGAGGAGGCTTAAAGCTGCCGCGACGAAT 391
Oy 3707 TAAGATGAGAGCAGCTGATTTATCTGAGTACACAGGCGCTGGGAGATGAGAGAA 3766
Db 392 TAAGATGAGAGCAGCTGATTTATCTGAGTACACAGGCGCTGGGAGATGAGAGAA 451
Oy 3767 TGATATCCCGCAGCTCAAGTCTTATTTCTCAAGTGTCTCCATCAAGCCCTTACT 3826
Db 452 TGATATCCCGCAGCTCAAGTCTTATTTCTCAAGTGTCTCCATCAAGCCCTTACT 511
Oy 3827 TG 3828
Db 512 TG 513

RESULT 14
AM950112 377 bp mRNA linear EST 01-JUN-2000
LOCUS EST162077 MAGE resequences, MAGA Homo sapiens cDNA, mRNA sequence.
ACCESSION AM950112
VERSION AM950112.1 GI:8139648
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS 1 (bases 1 to 377)
Hedger, P., Qi, R., Abernathy, K., Dharp, S., Gaspar, R., Gay, C., Holt
Quackenbush, J.
Assessment of gene expression patterns in a model of colon tumor
metastasis using a 19,200 element cDNA microarray
Unpublished (2000)
JOURNAL Contact: John Quackenbush
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 3528
Fax: 301 838 0208
Email: johnq@tigr.org
Plate: 9
Seq primer: Reverse.
Location/Qualifiers
source
1. 377
/organism="Homo sapiens"
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/clone_1ib="MAGE resequences, MAGA"
/note="Vector: pBluescriptSKm"
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Best Local Similarity 100.0%; Pred. No. 8e-103;
Matches 231; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2734 TCACAAGCTGGCCAGGTGGCCACAGAGAGCTTGAGAGACAGAGCTGAGAGCCCTGT 2793

```


Db 241 AATTCCACCAAGTATGCAATGAATGGGAAAAAGACATCAACAACTGAGAGAAAGCCC 300
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Db 301 CCGTGTGACACCTCCAGTCCAGTGAACAGAGATGACCTTCATATCAACACTGAGAACG 360
QY 361 AGCAGATGATGATCCCGGACGCTGCTGAGAGACGGGAAAAAGATCTCCAGATCTCTGG 420
Db 361 AGCAGATGATGATCCCGGACGCTGCTGAGAGACGGGAAAAAGATCTCCAGATCTCTGG 420
QY 421 TCAGAGTGAATGACACCCCATTTGCTCTCCCGACGAGTGTGAGATCAAAAACCTGGGGCA 480
Db 421 TCAGAGTGAATGACACCCCATTTGCTCTCCCGACGAGTGTGAGATCAAAAACCTGGGGCA 480
QY 481 GCGGGATGACTTTCAGAGACACTTCACCATTAAGGCCAAAGGATTTTAACCTGACGT 540
Db 481 GCGGGATGACTTTCAGAGACACTTCACCATTAAGGCCAAAGGATTTTAACCTGACGT 540
QY 541 CCAAACTTGTGCTGGGGTCCATTATGACTCCCAAAAGTTTGACAGAGAGACCCAGGACA 600
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QY 601 AGCTTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGCAATTTGTCACCAATATATAG 660
Db 601 AGCTTACCCCTCCAGATGAGCTTCTACCTCAAGCTATGCAATTTGTCACCAATATATAG 660
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Db 661 GCTCTCTCAAAAGAGCAAAAATAGAGAACTGTGCGCAGGGTGAAGCGTAAACAAAG 720
QY 721 AGATTAACAAACAGAGAACTTACCACTGACGAGAGATGAGCTCATTTGSCCACCAGC 780
Db 721 AGATTAACAAACAGAGAACTTACCACTGACGAGAGATGAGCTCATTTGSCCACCAGC 780
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Db 841 TCGATCCCGGCACTGTCCACTGCGCGGGAATGTTTGAACATCTGCAACACGTCG 900
QY 901 GTTACTCCCAACAACTGCGCAACATGAGTGGGCCATCACCGTGTTCGCCAGCGAGTG 960
Db 901 GTTACTCCCAACAACTGCGCAACATGAGTGGGCCATCACCGTGTTCGCCAGCGAGTG 960
QY 961 ATGGCAAGCAGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGAGTACCA 1020
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Db 1021 TGGCAGATGGCAGCATCAGAGGGGACCTGCCAAGCTGGAATTCACCTGAGTGCATCG 1080
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Db 1081 ACCTGGGCTGGAAGCCCAAGTACGGCGCTGTGATGTGCTCCCTGCTGAGGAGCA 1140
QY 1141 ATGGCGGTGACCTGAGCTTTCGAAATCCCACTGACCTTGTGATGAGTGGGCAAGG 1200
Db 1141 ATGGCGGTGACCTGAGCTTTCGAAATCCCACTGACCTTGTGATGAGTGGGCAAGG 1200
QY 1201 AACATCCCAATAGAGTGTGTTGCGGAATGAGACTAAAGTGTAGCAGCTTGCCTGAG 1260
Db 1201 AACATCCCAATAGAGTGTGTTGCGGAATGAGACTAAAGTGTAGCAGCTTGCCTGAG 1260
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Db 1321 GGTACATGGGCAAGAGATGAGTGGGAGTCTGAGAGTCTCAGGAGCTACCAATCC 1380
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QY	2521	ACCTTGGGGGTTTGCCACAGGACCAACCCAGCCCGCCCTGGTCCAAAGCATCTCTGGAGGACAGTGG	2580
Db	2521	ACCTTGGGGGTTTGCCACAGGACCAACCCAGCCCGCCCTGGTCCAAAGCATCTCTGGAGGACAGTGG	2580
QY	2581	TGGATGGCCCCCACAACCCCAACAGACAGTGGCGCTTGGAGAGACTGGATGAGAGTGGCACCT	2640
Db	2581	TGGATGGCCCCCACAACCCCAACAGACAGTGGCGCTTGGAGAGACTGGATGAGAGTGGCACCT	2640
QY	2641	ACTGGGTGACGTGACAAAGAGGCTGCCCCCGCTGCTCACTAGCCAGGACCCCTCACTACTCTCC	2700
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QY	2761	AAGAGCCGTGAGAGACAGAGGCTGGAGGCGCTGTGGCAGCGCTCAGAGTACAGCAAGTGGGA	2820
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QY	2821	AGTTTACACCAACAGGCCCACTTCTCTGGAGGTGCTAGAGAGTTTCCCGTCCCTGCGCGGTGT	2880
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Db	2941	CCCTCCCGGAGTACACAGCCGCCACGAGAGATCCACTGTACTGTGAGCCGTGTCACACTACACA	3000
QY	3001	CCGGAGATGGCCAGAGGTTCCCTCTGCACACGCTGTCTGCAGACATGAGCTCAACACACCTGGA	3060
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QY	3061	AGCCCCAAGACCCAGTGCCTCTGCTTGTGGGGAAATCCAGGCGCTTCCACCTGCCGAGG	3120
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QY	3121	ATCCCTCCCATCTCTTGCATCTCATATGAGGCGCTTGGCACAGGCACTGCGCCCTTCCCACTT	3180
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Db	3181	TCTGGCAGCAAGGCTCTCATGACATCCAGACACAAGGAGATGGGAGGAGCGGCATGACT	3240
QY	3241	TGTGTTTGGGTGGCGCGCCGACAGATGAGAGCCACATCTACACAGAGAGATGTCTGGAGA	3300
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QY	3361	CCAAGGTCTATGTTCAAGAGATCTCTGGGGAGAGCTGGCCAGGCGAGTGTCTCGTGGAG	3420
Db	3361	CCAAGGTCTATGTTCAAGAGATCTCTGGGGAGAGCTGGCCAGGCGAGTGTCTCGTGGAG	3420
QY	3421	TTCACAAAGAGCCAGGCTCATGCTATGTTTTCGGGGATGTGGGCATGTGGCCCGGAGACGTGG	3480
Db	3421	TTCACAAAGAGCCAGGCTCATGCTATGTTTTCGGGGATGTGGGCATGTGGCCCGGAGACGTGG	3480
QY	3481	CCGACACCCCTTAACACACTGTGTGGCTGCCAAGCTGAAATTTGAAATGAGAGCAAGTTCAGAG	3540
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QY	3541	ACTATTTCTTTCAGCTCAACAGCCCAAGGCGATACAGAAATATTTCTGGTCTGAT	3600
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QY	3601	TTTCCTTACGAGGCGCAAGAGACAGGGGTGGCGGTGCAGCCCGACGCTGGAGATGTCTAG	3660
Db	3601	TTTCCTTACGAGGCGCAAGAGAGACAGGGGTGGCGGTGCAGCCCGACGCTGGAGATGTCTAG	3660
QY	3661	CGCTCTGAGGGCCCTACAGAGAGGGGTTAAAGCTGCGGGCAGACACTTAAAGATGAGCCA	3720
QY	3661	CGCTCTGAGGGCCCTACAGAGAGGGGTTAAAGCTGCGGGCAGACACTTAAAGATGAGCCA	3720
QY	3721	GCTCGCATTTATCTGAGGTACACAGGGCCGTGGGGAGATGAGAGAAAGTATATCCGCCAGC	3780
Db	3721	GCTCGCATTTATCTGAGGTACACAGGGCCGTGGGGAGATGAGAGAAAGTATATCCGCCAGC	3780
QY	3781	CTCAAGTCTATTTTCCCTCAACGTTGCTGCCCATCAAGCCCTTTACTGACCTCTAACAA	3840
Db	3781	CTCAAGTCTATTTTCCCTCAACGTTGCTGCCCATCAAGCCCTTTACTGACCTCTAACAA	3840
QY	3841	GTACACCCCTGGATTGATGTCGGAAGCTCTCTCTCAAACTGGGGCCTCCCTGGATCCTTTGG	3900
Db	3841	GTACACCCCTGGATTGATGTCGGAAGCTCTCTCTCAAACTGGGGCCTCCCTGGATCCTTTGG	3900
QY	3901	AGACAAATCTTAAATCTCCAGGCGCTGGCGCAGTGGGTGGAAGAATGAGACTTGTGTGAGT	3960
Db	3901	AGACAAATCTTAAATCTCCAGGCGCTGGCGCAGTGGGTGGAAGAATGAGACTTGTGTGAGT	3960
QY	3961	GCACACCTTCAAGTACACACAGGAGAGGTGATCGACACATGTGTATTTAACTACCTTG	4020
Db	3961	GCACACCTTCAAGTACACACAGGAGAGGTGATCGACACATGTGTATTTAACTACCTTG	4020
QY	4021	TGTACAGTTATTTATGCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCTCCATGGCC	4080
Db	4021	TGTACAGTTATTTATGCTCTGTATTTAAAAAACTAACACCCAGTCTGTTCCTCCATGGCC	4080
QY	4081	ACTTGGGCTTCCCTGTATATATTCCTTGATGAGAGATTTTACATGAAATTTGATTTACTT	4140
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QY	4141	TATATC 4145	
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RESULT 2			
US-08-265-046-1			
; Sequence 1, Application US/08265046			
; Patent No. 5658565			
; GENERAL INFORMATION:			
; APPLICANT: Timothy R. Billiar			
; APPLICANT: Edith Tzeng			
; APPLICANT: Andreas K. Nussler			
; APPLICANT: David A. Geller			
; APPLICANT: Richard L. Simmons			
; TITLE OF INVENTION: Inducible Nitric Oxide Synthase			
; NUMBER OF SEQUENCES: 2			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: Lewis F. Gould, Jr.			
; ADDRESSEE: Eckert Seamans Cherin & Mellott			
; STREET: 1700 Market Street, Suite 3232			
; CITY: Philadelphia			
; STATE: PA			
; COUNTRY: USA			
; ZIP: 19103			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: PatentIn Release #1.0, Version #1.25			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/265,046			

FILING DATE: 24-JUN-1994
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Gould, Lewis F. Jr.
REGISTRATION NUMBER: 25,057
REFERENCE/DOCKET NUMBER: 119130
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TELEPHONE: (215) 575-6020
TELEFAX: (215) 575-6015
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4145 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
DESCRIPTION: Human Hepatocyte Inducible Nitric Oxide
SYNTHESIS: Synthesis cDNA clone
HYPERHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
TISSUE TYPE: Induced Human Hepatocyte RNA
IMMEDIATE SOURCE:
LIBRARY: Lambda Zap II cDNA
CLONE: PHINOS
POSITION IN GENOME:
CHROMOSOME/SEGMENT: unknown
MAP POSITION: unknown
UNITS: unknown
FEATURE:
NAME/KEY: CDS
LOCATION: 207..3668
IDENTIFICATION METHOD: Experiment
US-08-265-046-1

Query Match 100.0%; Score 4145; DB 1; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 421 TCAGAGTGAATGACCCCATTTCTCTCCCGACGGCATGTGAGATCAAAAATCTGGGCA 480
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Db 2641 ACTGGGTCAGTACAG 2700

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Qy 3361 CCAGAGTATGTCAGAGACATCTGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3420
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Qy 3481 CCAACACCTGAG 3540
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Qy 3541 ACTATTTCTTACAGCTCAAG 3600
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Qy 3601 TTCTTACAG 3660
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Qy 3661 CGCTCTGAG 3720
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Qy 3721 GCTCTGATTAATCTGAGAGTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3780
Db 3721 GCTCTGATTAATCTGAGAGTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3780

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Db 781 AGGCTGGCGCAATGCCCGCATGTGGAGGATCCATGGTCCAACTGCGAGGCT 840
Qy 841 TCGATGCCCGAGCTGTTCACACTGCGCGGAAATGTTTGAACACATCGCAGACGTC 900
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Db 2101 CTGGGTTGCGGCTTGTGCTGATGATGATGATGATGATGATGATGATGATGATGATG 2160
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Db 2161 AGCTACCCCGATGGAG 2220
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Db 3721 GCTCTGATTTATCTAGGTACAGAGGCTGGGAGATGAGAAAGTATATCCCGAGC 3780
QY 3781 GTCAGTCTTATTTCTCAAGTGTCTGCCATCAAGCCCTTACTTAAGCTCTCTAAATA 3840
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Db 3781 GTCAGTCTTATTTCTCAAGTGTCTGCCATCAAGCCCTTACTTAAGCTCTCTAAATA 3840
QY 3841 GTAGACCCCTGATGATGAGAGCTCCCTCTCAAACTGGGGCTCCCTGGCTCTGG 3900
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Db 3841 GTAGACCCCTGATGATGAGAGCTCCCTCTCAAACTGGGGCTCCCTGGCTCTGG 3900
QY 3901 AGACAAATCTTAATATGCGAGGCTGGCGAGTGGGTGAAGAATGGAACCTGCTGAGT 3960
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Db 3961 GCACCACTTCAAGTACACACAGAGAGTCTATGCGACACATGTTATTTAACTCCCTG 4020
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QY 4141 TATATC 4145
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Db 4141 TATATC 4145
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RESULT 4
PCT-US93-11401-1
Sequence 1, Application PCTUS9311401
GENERAL INFORMATION:
APPLICANT: Billiar, Timothy R.
APPLICANT: Nussler, Andreas K.
APPLICANT: Geller, David A.
APPLICANT: Simmons, Richard L.
TITLE OF INVENTION: cDNA Clone for Human Inducible Nitric
TITLE OF INVENTION: Oxide Synthase And Process for Preparing Same
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold B. Silverman
ADDRESSEE: Eckert Seamans Cherin & Mellott
STREET: 600 Grant Street, 42nd Floor
CITY: Pittsburgh
STATE: PA
COUNTRY: USA
ZIP: 15219
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11401
FILING DATE: 25-NOV-1992
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/981,344
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Silverman, Arnold B.
REGISTRATION NUMBER: 22,614
REFERENCE/DOCKET NUMBER: 116972
TELECOMMUNICATION INFORMATION:
TELEPHONE: (412) 566-6000
TELEFAX: (412) 566-6099
TELEX: 866172
INFORMATION FOR SEQ. ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4145 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
TISSUE TYPE: Induced Human Hepatocyte RNA
IMMEDIATE SOURCE:
LIBRARY: Lambda zap II cDNA
CLONE: PHINOS
POSITION IN GENOME:
CHROMOSOME/SEGMENT: unknown
MAP POSITION: unknown
UNITS: unknown
FEATURE:
NAME/KEY: CDS
LOCATION: 207..3668
IDENTIFICATION METHOD: Experiment

-CT-US93-11401-1

Query Match 100.0%; Score 4145; DB 5; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CTGCTTTAAATCTCTGGCCACCTTGTATGAGGGAGTGGGAGTTCTAGACAGTCCG 60
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 Db 3121 ATCCCTCCCATCTTGCATCTCATGCGGCTGGCAGAGGCACTGTGCGCTTCCGAGTT 3180
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 Db 3421 TTCACAGAGAGCCAGGCCACTATATGTTTCCGGGGATGTGCGCATGAGCCCGGAGCTGG 3480
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 Db 3481 CCCACAGCCCTGAGAGAGCTGTGGCTGCCAGCTGGAATTTGATGAGAGAGAGTGCAGG 3540
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 Db 3541 ACTATTTCTTCAGCTCAAGAGCCAGAGGCTATCAAGAGATATCTTGGGTGCTGTAT 3600
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 Db 3781 CTCAAGCTTATTTCTCAAGAGTGTGCTCCCATCAAGCCCTTACTTGAACCTTCAACA 3840
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 |||||
 Db 4081 ACTTGGGTCTTCCCTGTATGATTCCTGATGAGATATTACATGAAATGCAATTTACTT 4140
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 OY 4141 TAAATC 4145
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 Db 4141 TAAATC 4145

RESULT 5
 PCT-US95-07849-1
 ; Sequence 1, Application PC/TUS9507849
 ; GENERAL INFORMATION:
 ; APPLICANT: University of Pittsburgh of the Commonwealth System of Higher


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? APPLICANT: Education
? TITLE OF INVENTION: Inducible Nitric Oxide Synthase
? TITLE OF INVENTION: Gene for Treatment of Disease
? NUMBER OF SEQUENCES: 2
? CORRESPONDENCE ADDRESS:
? ADDRESSEE: Lewis F. Gould, Jr.
? ADDRESSEE: Eckert Seamans Cherin & Mellott
? STREET: 1700 Market Street, Suite 3232
? CITY: Philadelphia
? STATE: PA
? COUNTRY: USA
? ZIP: 19103
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: Patent Release #1.0, Version #1.25
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: PCT/US95/07849
? FILING DATE:
? CLASSIFICATION:
? ATTORNEY/AGENT INFORMATION:
? NAME: Gould, Lewis F. Jr.
? REGISTRATION NUMBER: 25,057
? REFERENCE/DOCKET NUMBER: 119130-2
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (215) 575-6020
? TELEFAX: (215) 575-6015
? TELEX:
? INFORMATION FOR SEQ ID NO: 1:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 4145 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: double
? TOPOLOGY: linear
? MOLECULE TYPE: cDNA
? DESCRIPTION: Human Hepatocyte Inducible Nitric Oxide
? HYPOTHEICAL: NO
? ANTI-SENSE: NO
? ORIGINAL SOURCE:
? TISSUE TYPE: Induced Human Hepatocyte RNA
? IMMEDIATE SOURCE:
? LIBRARY: Lambda zap II cDNA
? POSITION IN GENOME:
? CLONE: PHINOS
? CHROMOSOME/SEGMENT: unknown
? MAP POSITION: unknown
? UNITS: unknown
? FEATURE:
? NAME/KEY: CDS
? LOCATION: 207..3668
? IDENTIFICATION METHOD: Experiment
? PCT-US95-07849-1

Query Match 100.0%; Score 4145; DB 5; Length 4145;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 4145; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 241 AATTCACACAGTATGCAATGAATGGGAAAAAGCATCAACACATGTGTGAAAAAGCC 300
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Db 301 CTTGTCCACCTCCAGTCCAGTGACACAGATGACCTTCACTGATCAACCTCAGCAAGC 360
Qy 361 AGCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 420
Db 361 AGCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 420
Qy 421 TCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 480
Db 421 TCAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 480
Qy 481 GCGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 540
Db 481 GCGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 540
Qy 541 CCAATCTGCTGCGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 600
Db 541 CCAATCTGCTGCGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 600
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Qy 721 AGATAGAAACACAGAGAACCTACCAATGACGAGGATGATGATGATGATGATGATGATG 780
Db 721 AGATAGAAACACAGAGAACCTACCAATGACGAGGATGATGATGATGATGATGATGATG 780
Qy 781 AGGCTGCGGCAATGCGGCGGATGATGATGATGATGATGATGATGATGATGATGATGATG 840
Db 781 AGGCTGCGGCAATGCGGCGGATGATGATGATGATGATGATGATGATGATGATGATGATG 840
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Db 901 GTTACTCCACACAAATGAGCAATCAGTGGGATGATGATGATGATGATGATGATGATGATG 960
Qy 961 ATGGAGAGAGAGATGCGGCGGATGATGATGATGATGATGATGATGATGATGATGATGATG 1020
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Qy 1141 ATGGCCGAGACCTGAGCTCTTCAAAATCCCACTGACCTGATGATGATGATGATGATGATG 1200
Db 1141 ATGGCCGAGACCTGAGCTCTTCAAAATCCCACTGACCTGATGATGATGATGATGATGATG 1200
Qy 1201 AACATCCCAATATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1260
Db 1201 AACATCCCAATATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1260
Qy 1261 TGCCCAACATGCTCTTGAAGTGGGCGGCTGGAAGTCCCAAGGATGATGATGATGATGATG 1320
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1  MEDM TYPE: Floppy disk
2  COMPUTER: IBM PC compatible
3  OPERATING SYSTEM: PC-DOS/MS-DOS
4  SOFTWARE: Patentia Release #1.0, Version #1.30
5  CURRENT APPLICATION DATA:
6  APPLICATION NUMBER: US/09/126,109
7  FILING DATE: 30-JUL-1998
8  CLASSIFICATION:
9  PRIOR APPLICATION DATA:
10 APPLICATION NUMBER: US 60/055,092
11 FILING DATE: 30-JUL-1997
12 PRIOR APPLICATION DATA:
13 APPLICATION NUMBER: US Unknown
14 FILING DATE: 03-MAR-1998
15 ATTORNEY/AGENT INFORMATION:
16 NAME: McMillan, Nabeeela R.
17 REGISTRATION NUMBER: P-43,363
18 REFERENCE/DOCKET NUMBER: UTSD:560
19 TELECOMMUNICATION INFORMATION:
20 TELEPHONE: (512) 418-3000
21 TELEFAX: (512) 474-7577
22 INFORMATION FOR SEQ ID NO: 11:
23 SEQUENCE CHARACTERISTICS:
24 LENGTH: 4062 base pairs
25 TYPE: nucleic acid
26 STRANDEDNESS: single
27 TOPOLOGY: linear
28 MOLECULE TYPE: DNA (genomic)
29 US-09-126-109-11

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Oy 702 GTGGAAGCGGTAAACAAAGAGATAGAAACAAACAGAACTTACCACTGACGGAGATGAG 761
Db 601 GTGGAAGCGGTAAACAAAGAGATAGAAACAAACAGAACTTACCACTGACGGAGATGAG 660
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Db 661 CTCATCTTCCGACCAAGCAGAGCGCTGGCGCAATGCCCCACGCTGCATTTGGAGATCCAG 720
Oy 822 TGGTCCAACTGACAGTCTTTCGATGCCGCACTGTTCCACTGCTCCCGGGAATGTTTGA 881
Db 721 TGGTCCAACTGACAGTCTTTCGATGCCGCACTGTTCCACTGCTCCCGGGAATGTTTGA 780
Oy 882 CACATCTGACAGAGTCTTTCGATGCCGCACTGTTCCACTGCTCCCGGGAATGTTTGA 941
Db 781 CACATCTGACAGAGTCTTTCGATGCCGCACTGTTCCACTGCTCCCGGGAATGTTTGA 840
Oy 942 GTGTTCCCGCCAGCGAGATGATGCAAGCAGACCTCCGGGTGTGGAAATGCTCAGCTCATC 1001
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Oy 1002 CCGTATGCTGCTACCAATGACCAATGACCAATGACCAATGACCAATGACCAATGACCA 1061
Db 901 CCGTATGCTGCTACCAATGACCAATGACCAATGACCAATGACCAATGACCAATGACCA 960
Oy 1062 TTCACTCAGCTGATGATGACCTGAGCTGAGAGCCCAAGTACGGCCCTTGCATGTGCTC 1121
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Oy 1122 CCGCTGCTGCTGACGACCAATGACCAATGACCAATGACCAATGACCAATGACCAATG 1181
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Db 1081 GTGCTTGTGAGTGGCCATGAGAACATCCCAATACAGATGTTTGGGAATGAGCTTAAG 1140
Oy 1242 TGGTACGCTGCTGACAGTGGCCCAATGACCAATGACCAATGACCAATGACCAATG 1301
Db 1141 TGGTACGCTGCTGACAGTGGCCCAATGACCAATGACCAATGACCAATGACCAATG 1200
Oy 1302 GGGTGGCCCTTTCATGAGTGGTACATGAGGACAGAGATGAGGATGAGGATGAGGATG 1361
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Oy 1482 TTTTCAGAGCAGAAATGTGATGATGATGATGATGATGATGATGATGATGATGATG 1541
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Db 1681 TGTATGCTGATGCGCAAGACATGCGCTCCGAGTACAGATGATGATGATGATGATGATG 1740
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Db 1741 GAGCAGAGAAATACAGAGGCTGAGGCTGGGAGCTGGGAGCTTATTCAGCTGCTGCTTC 1800
Oy 1902 AACCCAGAGTGTCTCATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1961
Db 1801 AACCCAGAGTGTCTCATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1860
Oy 1962 CTGTTGGTGGTACAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATG 2021
Db 1861 CTGTTGGTGGTACAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATG 1920
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Db 2641 CTGGGCGAGGAGGAGCAGAGAGCTGAGAGAGAGAGGCTGAGAGGCTGAGAGGCTGAGAG 2700
Oy 2802 TCAGAGTACAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2861
Db 2701 TCAGAGTACAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2760
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Db 2821 AGGTTTACTCATAGCTCCCTCCGGGATCATACAGCCCGAGAGATCCACCTACTGTG 2880
OY 2982 GCGTGTGTACCTACACACCGAGATGCGCGGATCCCTGACACCGAGGTGTGTGAC 3041
Db 2881 GCGTGTGTACCTACACACCGAGATGCGCGGATCCCTGACACCGAGGTGTGTGAC 2940
OY 3042 ACATGCTTCAACAGCTTGAAGCCCAAGACCCAGTCCCTTGTGTGCGGATGCCAG 3101
Db 2941 ACATGCTTCAACAGCTTGAAGCCCAAGACCCAGTCCCTTGTGTGCGGATGCCAG 3000
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OY 3462 GCGATGCGCGGAGCTGCGGAGCCAGCTGAGAGAGTGTGTGTGTGTGTGTGTGTGT 3521
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OY 3582 GATATCTTGGTGTCTGATTTCTTCTGAGAGGAGAGAGAGAGAGAGAGAGAGAGAG 3641
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Db 3541 AGCAGCTGAGATGTAGAGGCTGTGAGGCTTACAGAGAGGAGGTTAAAGCTCCGAGCA 3600
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OY 3762 GAAAGGATATATCCAGAGCTCAAGTATTTCTCAAGTGTGTGTGTGTGTGTGTGT 3821
Db 3661 GAAAGGATATATCCAGAGCTCAAGTATTTCTCAAGTGTGTGTGTGTGTGTGTGT 3720
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Db 3781 GGCCTCCCTGCTGCTTGGAGACAAATCTTAAATGCCAGGCTGGGAGGGGAGAG 3840
OY 3942 ATGAGACTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4001
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Db 3901 TGTGATTTAACTGGCTGTGTGAGAGTATTTAGTCCCTGTATTTAAAAAATACAC 3960
OY 4062 CAGTGTGTCCCATGAGGACCTTGGGTCCTGCTGATGATTTCTGTAGAGATTTTA 4121
Db 3961 CAGTGTGTCCCATGAGGACCTTGGGTCCTGCTGATGATTTCTGTAGAGATTTTA 4020
OY 4122 CATGAATGCAATTTACTTTATC 4145
Db 4021 CATGAATGCAATTTACTTTATC 4044

RESULT 7
US-09-068-880-1
; Sequence 1, Application US/09068880B
; Patent No. 6203982
; GENERAL INFORMATION:
; APPLICANT: Nunokawa, Youichi
; APPLICANT: Oikawa, Shunzo
; APPLICANT: Tanaka, Shoji
; TITLE OF INVENTION: Method for Screening Compounds
; TITLE OF INVENTION: Regulating the Expression of Human-Inducible Nitric Oxide
; TITLE OF INVENTION: Synthase
; FILE REFERENCE: SHIM-001
; CURRENT APPLICATION NUMBER: US/09/068,880B
; CURRENT FILING DATE: 1998-09-02
; EARLIER APPLICATION NUMBER: PCT/Jp97/03303
; EARLIER FILING DATE: 1997-09-18
; NUMBER OF SEQ. ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ. ID NO 1
; LENGTH: 604
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-068-880-1.

Query Match 14.1%; Score 585; DB 4; Length 604;
Best Local Similarly 100.0%; Pred. No. 9.9e-271;
Matches 585; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3561 AGCAGAGGCGCTATCGAAGATCTTGTGCTGTATTTCTTACAGCGGAGAG 3620
Db 1 AGCAGAGGCGCTATCGAAGATCTTGTGCTGTATTTCTTACAGCGGAGAG 60
OY 3621 GACAGGCTGCGGTGACAGCCAGCAGCTGAGAGATGTCAAGCTGAGAGGCTACAGGA 3680
Db 61 GACAGGCTGCGGTGACAGCCAGCAGCTGAGAGATGTCAAGCTGAGAGGCTACAGGA 120
OY 3681 GGGGTAAACCTCCCGGACAGAACTTAAGATGAGAGCCAGCTGTGATTTCTGAGGTC 3740
Db 121 GGGGTAAACCTCCCGGACAGAACTTAAGATGAGAGCCAGCTGTGATTTCTGAGGTC 180
OY 3741 ACAGGAGCTGAGAGATGAGAGAAAGTATATCCCAAGCCAGTCTTATTTCTTAA 3800
Db 181 ACAGGAGCTGAGAGATGAGAGAAAGTATATCCCAAGCCAGTCTTATTTCTTAA 240
OY 3801 CGTTGCTCCCATCAAGCCCTTACTTGAACCTCTTCAAGAGAGAGAGAGAGAGAGAG 3860
Db 241 CGTTGCTCCCATCAAGCCCTTACTTGAACCTCTTCAAGAGAGAGAGAGAGAGAGAG 300
OY 3861 GAGCTCTCTCTCAAACTGGGAGCTCCCTGCTGCTGAGAGAGAGAGAGAGAGAGAGAG 3920
Db 301 GAGCTCTCTCTCAAACTGGGAGCTCCCTGCTGCTGAGAGAGAGAGAGAGAGAGAGAG 360
OY 3921 GGCCTGCGAGTGGTGAAGATGAGAACTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3980
Db 361 GGCCTGCGAGTGGTGAAGATGAGAACTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 420
OY 3981 CAGGAGTGTCTTATGACACACCTGTATTTACTGCTTGTGTGTGTGTGTGTGTGTGT 4040
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Db 421 CAGGAGGTGCTATGCACCACTGTATTAAGTCCCTGTGTACAGTTATTTATGCTTC 480
OY 4041 TGTATTTAAAAAATAACACCACTGTGTCCCATGGCCACTTGGGCTCTCCCTGTATG 4100
Db 481 TGTATTTAAAAAATAACACCACTGTGTCCCATGGCCACTTGGGCTCTCCCTGTATG 540
OY 4101 ATTCCTGTATGGAGATTTTACATGAATTTGATTTTACTTTTACTTTATC 4145
Db 541 ATTCCTGTATGGAGATTTTACATGAATTTGATTTTACTTTTATC 585

RESULT 8

US-09-068-880-14
; Sequence 14, Application US/09068880B
; Patent No. 6203982
; GENERAL INFORMATION:
; APPLICANT: Nunokawa, Youichi
; APPLICANT: Oikawa, Shinzo
; APPLICANT: Tanaka, Shoji
; TITLE OF INVENTION: Method for Screening Compounds
; TITLE OF INVENTION: Regulating the Expression of Human-Inducible Nitric Oxide
; FILE REFERENCE: SHIM-001
; CURRENT APPLICATION NUMBER: US/09/068, 880B
; CURRENT FILING DATE: 1998-09-02
; EARLIER APPLICATION NUMBER: PCT/JP97/03303
; EARLIER FILING DATE: 1997-09-18
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 1026
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-068-880-14

Query Match 11.68; Score 480; DB 4; Length 1026;
Best Local Similarity 100.0%; Pred. No. 2.2e-220;
Matches 480; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3666 TGAGGGGCTACAGGAGGGGTTAAAGCTCCGACACAACTTAAGATGAGCCAGCTCT 3725
Db 1 TGAGGGGCTACAGGAGGGGTTAAAGCTCCGACACAACTTAAGATGAGCCAGCTCT 60
OY 3726 GCATTATCTGAGGTACAGGGGCTGGGAGATGAGAGAAAGTATATCCCCAGCTCAA 3785
Db 61 GCATTATCTGAGGTACAGGGGCTGGGAGATGAGAGAAAGTATATCCCCAGCTCAA 120
OY 3786 GTCCTATTTCCCAAGCTGCTCCCATCAAGCCCTTACTTGACCTCCTAACAAGTAGC 3845
Db 121 GTCCTATTTCCCAAGCTGCTCCCATCAAGCCCTTACTTGACCTCCTAACAAGTAGC 180
OY 3846 ACCCTGATTTGATCGAGGCTCTCTCAAACTGGGGGCTCCCTGCTCCCTTGGAGACA 3905
Db 181 ACCCTGATTTGATCGAGGCTCTCTCAAACTGGGGGCTCCCTGCTCCCTTGGAGACA 240
OY 3906 AAATCTTAATGCGAGGCTGCGAGTGGGTGAAGAATGGAACCTGCTGAGTAGCACC 3965
Db 241 AAATCTTAATGCGAGGCTGCGAGTGGGTGAAGAATGGAACCTGCTGAGTAGCACC 300
OY 3966 ACTTCAAGTACAGGAGGAGTGTATGACACCACTGTGTATTAAGTCCCTGTGTAC 4025
Db 301 ACTTCAAGTACAGGAGGAGTGTATGACACCACTGTGTATTAAGTCCCTGTGTAC 360
OY 4026 AGTTATTTAGCTCTGTATTTAAAAAATAACACCACTGTGTCCCATGGCCACTTG 4085
Db 361 AGTTATTTAGCTCTGTATTTAAAAAATAACACCACTGTGTCCCATGGCCACTTG 420
OY 4086 GGTCTTCCCTGTATGATCTGTATGATGAGATATTTACATGAATTTGATTTTACTTTATC 4145
Db 421 GGTCTTCCCTGTATGATCTGTATGATGAGATATTTACATGAATTTGATTTTACTTTATC 480

Job time : 154 secs

Search completed: March 14, 2003, 13:34:01

GenCore version 5.1.4 p5.4578
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OM nucleic - nucleic search, using sw model

Run on: March 14, 2003, 08:01:33 ; Search time 10444 Seconds

(without alignments)
11550.281 Million cell updates/sec

Title: US-09-490-208-3

Perfect score: 4145

Sequence: 1 ctgccttaaaatctctgcgc.....aattgcatttacttaatc 4145

Scoring table: OLIGO_NUC

Gapop 60.0 , Gapext 60.0

Searched: 2054640 segs, 14551402878 residues

Word size : 50

Total number of hits satisfying chosen parameters: 92

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database :

GenEmbl:*

1: gb_ba:*

2: gb_htg:*

3: gb_in:*

4: gb_om:*

5: gb_ov:*

6: gb_pat:*

7: gb_ph:*

8: gb_pl:*

9: gb_pr:*

10: gb_ro:*

11: gb_sts:*

12: gb_sy:*

13: gb_un:*

14: gb_vi:*

15: em_ba:*

16: em_fun:*

17: em_hum:*

18: em_in:*

19: em_mu:*

20: em_om:*

21: em_or:*

22: em_ov:*

23: em_pat:*

24: em_ph:*

25: em_pl:*

26: em_ro:*

27: em_sts:*

28: em_un:*

29: em_vi:*

30: em_htg_hum:*

31: em_htg_inv:*

32: em_htg_other:*

33: em_htg_mus:*

34: em_htg_pln:*

35: em_htg_rod:*

36: em_htg_mam:*

37: em_htg_vrt:*

38: em_sy:*

39: em_htgo_hum:*

40: em_htgo_mus:*

41: em_htgo_other:*

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4145	100.0	4145	6 115516	I15516 Sequence 1
2	4145	100.0	4145	6 161175	I61175 Sequence 1
3	4145	100.0	4145	9 HUMTNSA	L09210 Homo sapien
4	3503	84.5	35764	12 AY046510	AY046510 Adenovira
5	3482	84.0	4164	6 A39980	A39980 Sequence 1
6	3482	84.0	4164	6 A39980	X73029 H. sapiens m
7	3381	81.6	4062	6 AR124185	U31511 Human indic
8	3357	81.0	4150	6 AX067222	AX067222 Sequence
9	3357	81.0	4150	6 AF068236	AF068236 Homo sapi
10	3357	81.0	4150	6 AF068236	AF068236 Homo sapi
11	3327	80.3	3946	6 AX067221	U20141 Human indic
12	3327	80.3	3946	6 AX067221	D26525 Human mRNA
13	3290	79.4	3946	9 HUMTNSA	U05810 Homo sapien
14	3085	74.4	3595	9 HUMTNSA	L24555 Homo sapien
15	3039	73.3	3855	9 HUMTNSA	U05810 Homo sapien
16	1970	47.5	3345	6 AB022318	AB022318 Homo sapi
17	585	14.1	604	6 AR142643	AR142643 Homo sapi
18	585	14.1	604	6 AR142643	AR142643 Homo sapi
19	504	12.2	64641	2 AC130289	AC130289 Homo sapi
20	504	12.2	64641	2 AC130289	AC130289 Homo sapi
21	504	12.2	64641	2 AC130289	AC130289 Homo sapi
22	480	11.6	1026	6 AR142656	AR142656 Sequence
23	480	11.6	1026	6 AR142656	E28948 Method for
24	286	6.9	634	9 HSNOS2E17	X85781 H. sapiens N
25	200	4.8	351	9 HSNOS2E12	X85768 H. sapiens N
26	197	4.8	64641	2 AC130289	AC130289 Homo sapi
27	185	4.5	174503	9 HSNOS2E12	AC005697 Homo sapi
28	183	4.4	268	9 HSNOS2E2	X85760 H. sapiens N
29	180	4.3	180	9 HSNOS2E18	S76479 Calcium-cal
30	179	4.3	339	9 HSNOS2E17	X85773 H. sapiens N
31	165	4.0	343	9 HSNOS2E6	X85764 H. sapiens N
32	155	3.7	343	9 HSNOS2E6	U24641 Human chrom
33	155	3.7	343	9 HSNOS2E6	X85764 H. sapiens N
34	150	3.6	480	9 HSNOS2E11	X85770 H. sapiens N
35	147	3.5	348	9 HSNOS2E14	X85766 H. sapiens N
36	144	3.5	602	9 HSNOS2E89	X85780 H. sapiens N
37	137	3.3	269	9 HSNOS2E26	X85774 H. sapiens N
38	137	3.3	438	9 HSNOS2E18	D26055 Human ntlrl
39	135	3.3	273	9 HSNOS2E18	L26055 Human ntlrl
40	133	3.2	622	9 HUMTNSA	X85782 H. sapiens N
41	133	3.2	1291	9 HSNOS2E5	X85763 H. sapiens N
42	133	3.2	5493	9 HSNOS2E5	AX348110 Sequence
43	125	3.0	287	9 HSNOS2E5	AF017634 Homo sapi
44	110	2.7	1407	6 AX348110	AF017634 Homo sapi
45	110	2.7	8464	9 HSNOS2E15	X85771 H. sapiens N
46	107	2.6	285	9 HSNOS2E7	X85765 H. sapiens N
47	102	2.5	287	9 HSNOS2E7	U31907 Maccaca mula
48	99	2.4	490	9 HSNOS2E21	X85777 H. sapiens N
49	97	2.3	345	9 HSNOS2E21	X85777 H. sapiens N
50	96	2.3	918	9 HSNOS2E21	X85779 H. sapiens N
51	95	2.3	336	9 HSNOS2E20	X85776 H. sapiens N
52	88	2.1	208	9 HSNOS2E3	X85761 H. sapiens N
53	88	2.1	283	9 HSNOS2E3	S75615 INOS-nlrl
54	86	2.1	445	4 AF254445	AF254445 Ovis arie
55	85	2.1	289	4 HSNOS2E13	X85769 H. sapiens N
56	84	2.0	15351	9 AC015688	AC015688 Homo sapi
57	84	2.0	16750	2 AC068106	AC068106 Homo sapi
58	81	2.0	293	9 HSNOS2E19	AF077821 Canis fam
59	77	1.9	4050	4 AF077821	AF077821 Canis fam
60	63	1.5	247	9 HSNOS2E24	X85778 H. sapiens N
61	62	1.5	290	9 HSNOS2E23	AY027883 Equus cab
62	61	1.5	3936	4 AY027883	AY027883 Equus cab
63	59	1.4	226	6 HSNOSX05	AF469048 Oryctolag
64	59	1.4	310	4 AF469048	AF469048 Oryctolag
65	59	1.4	474	4 AF329377	AF329377 Equus cab

Pred. No. is the number of results predicted by chance to have a


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Db 1321 GGTACATGAGGACAGAGATCGAGTCCGGACTTCTGTGACGCTCCAGGCTTCACATATCC 1380
QY 1381 TGGAGAGAGTGGGACAGAGATGGGCTTGGAAACGACAGAGTGGCTTCCTCTGGAAG 1440
Db 1381 TGGAGAGAGTGGGACAGAGATGGGCTTGGAAACGACAGAGTGGCTTCCTCTGGAAG 1440
QY 1441 ACCAGGCTGTGTGATCAACATTTGCTGTATCCATATGTTTGAAGAGCAAGATGTA 1500
Db 1441 ACCAGGCTGTGTGATCAACATTTGCTGTATCCATATGTTTGAAGAGCAAGATGTA 1500
QY 1501 CCATCATGAGACCAACCTTGGCTGCAAGATCTTATGATGATGATGCAAGATGAATACC 1560
Db 1501 CCATCATGAGACCAACCTTGGCTGCAAGATCTTATGATGATGATGCAAGATGAATACC 1560
QY 1561 GGTCCCGTGGGGGCTGCCGGGACAGATGATTTGGCTGGTCCCTCCATGCTGGGAGCA 1620
Db 1561 GGTCCCGTGGGGGCTGCCGGGACAGATGATTTGGCTGGTCCCTCCATGCTGGGAGCA 1620
QY 1621 TCACCCCGGTGTTTACACAGAGATGCTGAACCTACGCTCTCCCTTCTACTATATC 1680
Db 1621 TCACCCCGGTGTTTACACAGAGATGCTGAACCTACGCTCTCTCCCTTCTACTATATC 1680
QY 1681 AGGTAGAGGCTTGAAGAAACCATGCTGCTGACAGAGAGAGAGAGAGAGAGAGAGAG 1740
Db 1681 AGGTAGAGGCTTGAAGAAACCATGCTGCTGACAGAGAGAGAGAGAGAGAGAGAGAG 1740
QY 1741 AGATTCCATTGAAAGTCTTGTCAAGAGCTGCTGCTTGTGCTGCTGCTGCTGCTGCTG 1800
Db 1741 AGATTCCATTGAAAGTCTTGTCAAGAGCTGCTGCTTGTGCTGCTGCTGCTGCTGCTG 1800
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Db 1801 CAATGGGCTCCCGAGTCAAGAGTCAACATCTCTTGTGACAGAGAGAGAGAGAGAGAG 1860
QY 1861 CGCTGGGCTTGGGAGCTTGGGGGCTTATTCAGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1920
Db 1861 CGCTGGGCTTGGGAGCTTGGGGGCTTATTCAGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1920
QY 1921 TGGATAGTACAGGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
Db 1921 TGGATAGTACAGGCTGAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1980
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Db 1981 CGTTGGGAATGGAGAGTGGGCTTGGCAATGGAGAGAGAGAGAGAGAGAGAGAGAGAG 2040
QY 2041 TGAAGAGGCTCAACAAATTCAGTACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2100
Db 2041 TGAAGAGGCTCAACAAATTCAGTACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2100
QY 2101 CTGGGCTTCTGGGCTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2160
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QY 2161 AGCTACACCCGATGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2220
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Db 2221 GGGGCGGTGCAAACTTCMAAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2280
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Db 2581 TGGATGGGCTTGTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2640
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Db 2701 CGGACATCACACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2760
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Db 2761 AAGAGCTTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2820
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Db 2881 CTGCTGGCTTCTGCTGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2940
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Db 3181 TGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3240
QY 3241 TGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3300
Db 3241 TGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3300
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Db 3421 TCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3480
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Db 1141 ATGGCCGTGACCTGAGCTCTTCCGAAATCCACCTGACCTTGCTGAGGTGGCCATGG 1200
QY 1201 AACATCCCAATACGAGTGGTTTGGGAACTGAGCTAAAGTGTACGGCCCTGCTTCAG 1260
Db 1201 AACATCCCAATACGAGTGGTTTGGGAACTGAGCTAAAGTGTACGGCCCTGCTTCAG 1260
QY 1261 TGGCAACATGCTGCTGAGGTGGGGGCTGGAGTTCCAGGCTGGCCCTTCAATGCT 1320
Db 1261 TGGCAACATGCTGCTGAGGTGGGGGCTGGAGTTCCAGGCTGGCCCTTCAATGCT 1320
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QY 1381 TGGAGGAATGGGAGAGAGATGGGCTGGAACGCACAGCTGGCCCTGCTTGAAG 1440
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Db 1621 TCACCCCGTGTTCACACAGAGATGCTGAACTGCTGCTGCTCCCTTCTACTATAC 1680
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 AUTHORS Shapiro, R., Gao, W., Tzeng, E., Robbins, P. D., Timoty, B. R. and Gambotto, A.
 TITLE Construction and characterization of a clinical grade adenoviral vector encoding the human hINOS cDNA
 JOURNAL Unpublished
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QY	601 AGCTTACCCCTCCAGATGAGCTTCTTACCTCAAGCTATGCAATTTGTCAACCAATTTAG 660
DB	620 AGCTTACCCCTCCAGATGAGCTTCTTACCTCAAGCTATGCAATTTGTCAACCAATTTAG 679
QY	661 GCTCTTCAAGAGGCAAAATAGAGAAATCTGGCCAGGGTGAACCGGTAAACAAG 720
DB	680 GCTCTTCAAGAGGCAAAATAGAGAAATCTGGCCAGGGTGAACCGGTAAACAAG 739
QY	721 AGATGAAGAACACAGAACTACCAACTGAGAGGAGATGAGCTCTTCCGCCACAAAGC 780
DB	740 AGATGAAGAACACAGAACTACCAACTGAGAGGAGATGAGCTCTTCCGCCACAAAGC 799
QY	781 AGGCTGGGCGAATGCCACGCTGATGGAGAGATCCAGTGTCCAACTGCAGAGTCT 840
DB	800 AGGCTGGGCGAATGCCACGCTGATGGAGAGATCCAGTGTCCAACTGCAGAGTCT 859
QY	841 TCGATGCCCCGACGCTTCCATCTGCCCCGGGAAATTTTGAACACATCTGCAGACAGTGC 900
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QY	961 ATGGTAACGACGACTTCCGGGTGTGGAATGCTCAGCTCATCCGCTATGCTGGTACCAGA 1020
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DB	1040 TGCCAGATGGAGCATCAGAGGGGACCTGCAACGATGGGAATTCACGATGTGCATGC 1099
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QY	1321 GGTATGAGGACACAGATGAGAGTCCGGGACCTTGTGTCAGCTTCAGCGGTATCAACATTC 1380
DB	1340 GGTATGAGGACACAGATGAGAGTCCGGGACCTTGTGTCAGCTTCAGCGGTATCAACATTC 1399
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DB	1400 TGGAGAGAGTGGGAGGAGATGGGCTTGGAACGCAACAGCTGGCTCGCTTGGAAG 1459
QY	1441 ACCAGCTGTGCTTGAAGTCAACATGCTGTGATTCATATGTTTCAAGAGCAAGATGTGA 1500
DB	1460 ACCAGCTGTGCTTGAAGTCAACATGCTGTGATTCATATGTTTCAAGAGCAAGATGTGA 1519

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Db	1580	GGTCCGCTGGGGGCGTGCCTGGGAGACTGGATTTGGCTGGCTCCCTCCATGCTGGGAGCA	1639
QY	1621	TCACCCCGCTGTTTCACACGAGATGCTGAACCTGCTGTGCCCTTTCTACTCTATC	1680
Db	1640	TCACCCCGCTGTTTCACACGAGATGCTGAACCTGCTGTGCCCTTTCTACTCTATC	1699
QY	1681	AGGTAGAGGCGCTGGAAAACCATGTCTGGCAGAGACAGAAAGCGAGACCAAGACAAG	1740
Db	1700	AGGTAGAGGCGCTGGAAAACCATGTCTGGCAGAGACAGAAAGCGAGACCAAGACAAG	1759
QY	1741	AGATTCCATTGAAAGCTGTGGTCAAAAGCTGTGCTTTCCCTGTATGCTGATGCCAAGA	1800
Db	1760	AGATTCCATTGAAAGCTGTGGTCAAAAGCTGTGCTTTCCCTGTATGCTGATGCCAAGA	1819
QY	1801	CAATGGGCTCCCGAGTACAGATCAACCTCTCTTTCGACAGAGACAGAAATACAGAG	1866
Db	1820	CAATGGGCTCCCGAGTACAGATCAACCTCTCTTTCGACAGAGACAGAAATACAGAG	1879
QY	1861	CGCTGGCCCTGGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA	1922
Db	1880	CGCTGGCCCTGGGACCTGGGGGCTTATTCAGCTGTGCTTCAACCCCAAGTGTCTGCA	1935
QY	1921	TGCGTAATACAGGCTACAGTGCCTGGAGAGGACGGGCTGTTGGTGGTGGACAGTA	1988
Db	1940	TGCGTAATACAGGCTACAGTGCCTGGAGAGGACGGGCTGTTGGTGGTGGACAGTA	1999
QY	1981	CGTTTGGCAATGGAGACTGCGCTTGGCAATGAGAGAAATGAAAGAAATCGCTTCTATGC	2044
Db	2000	CGTTTGGCAATGGAGACTGCGCTTGGCAATGAGAGAAATGAAAGAAATCGCTTCTATGC	2055
QY	2041	TGAAAAGACTCAACACAAATTCAGAGTACGCTGTGGCTTCGGCTCAGCATATAC	2100
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QY	2101	CTCGGTTTCGCGCCTTTCGCTATACATTGATGATGATGATGCCAATGGGGGCTCTC	2166
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QY	2161	AGCTCAACCCCGATGGGAGAGAGGGGATGAGCTCACTGGGCGAGAGAGCGCTTCCGAGCTG	2222
Db	2180	AGCTCAACCCCGATGGGAGAGAGGGGATGAGCTCACTGGGCGAGAGAGCGCTTCCGAGCTG	2233
QY	2221	GGGCGCGTGAACCTTTCAGGAGAGCTGTGAGAGTTCATGTGTCGAGGCAACACACACA	2288
Db	2240	GGGCGCGTGAACCTTTCAGGAGAGCTGTGAGAGTTCATGTGTCGAGGCAACACACACA	2299
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Db	2480	CCATCTCGTGGAACTCTCTGTGAGATGGCCAAAGCCTGACTACCTGCGGGGAGC	2533
QY	2521	ACCTTGGGTTTGGCCAGGACACACGCGCGCGCTGATGATGATGATGATGATGATGATG	2588
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QY	2581	TGGATGGCCCCACACCCACCGAGATGGCGCTGGAGACCTGGATGAGTGGTCACT	2640
Db	2600	TGGATGGCCCCACACCCACCGAGATGGCGCTGGAGACCTGGATGAGTGGTCACT	2659
QY	2641	ACTGGGTCAGTATACAGAGAGGTGCGCCCTGCTCTACTAGCCAGGCGCTCACTCTCC	2700
Db	2660	ACTGGGTCAGTATACAGAGAGGTGCGCCCTGCTCTACTAGCCAGGCGCTCACTCTCC	2719
QY	2701	CGGACATCCACACACCCCAACCCAGCTGTCTCTCCAAAGCTGGCCCAAGTGGGCACAG	2760
Db	2720	TGGACATCCACACACCCCAACCCAGCTGTCTCTCCAAAGCTGGCCCAAGTGGGCACAG	2779
QY	2761	AAGAGCCTTAGAGACAGAGAGGTGAGAGCCCTGTGCACGCCCTCAGAGTACAGCAAGTGA	2820
Db	2780	AAGAGCCTTAGAGACAGAGAGGTGAGAGCCCTGTGCACGCCCTCAGAGTACAGCAAGTGA	2839
QY	2821	AGTTCCACCAACAGCCCCACATTCCTGGAGGTCTAGAGAGTGTCCCGTCCCGGGGT	2880
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QY	3301	TGGCCCAAGAGGGGTGCTCATGTGGGTGACACAGCCATTTCCCGCTGCTGGCAAGC	3360
Db	3320	TGGCCCAAGAGGGGTGCTCATGTGGGTGACACAGCCATTTCCCGCTGCTGGCAAGC	3379
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Db	3380	CCAAAGTCTATGTTCAAGGACATCTGGGGACAGAGTGGCGAGGAGTGTCTCGTGTGC	3439
QY	3421	TCCAAAGGAGCCAGGCGACCTATGTTTGGGGGATGTGCGCATGGCCCGGAGCTGG	3480
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QY	3481	CCCAACCCCTGAGACAGCTGGTGGCTCCCAAGCTGAATTTGATGAGAGACAGTGTGAGG	3540
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QY	3541	ACTATTTCTTTCACCTCAAGGCGCAAGAGGCTATACAGAAATATTTGGGTCTCTAT	3600
Db	3560	ACTATTTCTTTCACCTCAAGGCGCAAGAGGCTATACAGAAATATTTGGGTCTCTAT	3619
QY	3601	TTTCTTTAGAGGCGCAAGAGACAGAGGTGGGTGTGACAGCCAGCAGCCTGGAGATGTGAG	3660
Db	3620	TTTCTTTAGAGGCGCAAGAGACAGAGGTGGGTGTGACAGCCAGCAGCCTGGAGATGTGAG	3679
QY	3661	CGCTCTGAGGGCTTACAGAGAGGCTTAAAGCTGCCCGGACACAGAACTTAAGATGGAGCCA	3720

Db	3680	CGCTGTGAGGGCCCTACAGSAGAGGGGTTAAAGCTGCCGGCACACAACTTAAAGGTAGGAGCA	3739
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Db	3740	GCTCTGCATTTACTGAGGTGCACAGGGCGCTGGGAGATGAGGAAAGTATATCCCGCAGC	3799
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Db	3800	CTCAAGTCCTATTTCCCAACGTTGGTCCCACTCAAGCCCTTACTTACCTCCCTAACAA	3859
OY	3841	GTACACCCCTGGAGNTATGGGAGCCCTCTCTCAAACTGGGGGCGCTCCCTGGTCCCTGG	3900
Db	3860	GTACACCCCTGGAGNTATGGGAGCCCTCTCTCAAACTGGGGGCGCTCCCTGGTCCCTGG	3919
OY	3901	AGACAAATCTTAAATGCCAGGCGCTGGCGAGTGGGTGAAGAATGAACTTCTCTAGT	3960
Db	3920	AGACAAATCTTAAATGCCAGGCGCTGGCGAGTGGGTGAAGAATGAACTTCTCTAGT	3979
OY	3961	GCACCACTTCAAGTACACACAGAGAGTCTATGGCACCACTGTGATTTAACTGGCTTG	4020
Db	3980	GCACCACTTCAAGTACACACAGAGAGTCTATGGCACCACTGTGATTTAACTGGCTTG	4039
OY	4021	TGTACAGTATTTATGCTCTGTATTTAAAAAACTAACCACTGTGTTCCCATGGCC	4080
Db	4040	TGTACAGTATTTATGCTCTGTATTTAAAAAACTAACCACTGTGTTCCCATGGCC	4099
OY	4081	ACTTGGGCTTCCCTGTATGATTCCTGATGAGAGTATTTCAATGCAATTTGCAATTTACT	4140
Db	4100	ACTTGGGCTTCCCTGTATGATTCCTGATGAGAGTATTTCAATGCAATTTGCAATTTACT	4159
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RESULT	6
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LOCUS	HISINOSA
DEFINITION	H.sapiens mRNA for nitric oxide synthase.
ACCESSION	X73029
VERSION	X73029.1
KEYWORDS	GI:441452
SOURCE	nitric oxide synthase.
ORGANISM	Homo sapiens.
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo. 1 (bases 1 to 4164)
AUTHORS	Charles,I.G., Palmer,R.M., Hickery,M.S., Bayliss,M.T., Chubb,A.P., Hall,V.S., Moss,D.W. and Moncada,S.
TITLE	Cloning, characterization, and expression of a cDNA encoding an inducible nitric oxide synthase from the human chondrocyte
JOURNAL	Proc. Natl. Acad. Sci. U.S.A. 90 (23), 11419-11423 (1993)
MEDLINE	94068614
PUBMED	7504305
REFERENCE	2 (bases 1 to 4164)
AUTHORS	Charles,I.
TITLE	Direct Submission
JOURNAL	Submitted (23-APR-1993) I. Charles, Wellcome Research Laboratories, Ble. 113, Dept. of Ceek Biology, Langley Park, Beckenham, Kent, BR3 3BS, UK
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CDS	

[illegible]

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OY 721 AGATGAACAACAGAGAACCTACACACTGACGGAGATGACCTCATCTTGGCCACCAAGC 780
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DB 740 AGATGAACAACAAGAGAACCTACCAACTGACGGAGATGACCTCATCTTGGCCACCAAGC 799
OY 781 AGGCTGGGCGCAATGCCCCACGCTCATTTGGAGAGATCCAGTGGTCAACCTGGAGGTCT 840
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DB 800 AGGCTGGGCGCAATGCCCCACGCTCATTTGGAGAGATCCAGTGGTCAACCTGGAGGTCT 859
OY 841 TCGATGCCCCGACGCTTTCACCTGCGCGGAAATTTTGAACACATCTGACAGACAGTGC 900
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AR124185 4062 bp DNA linear PAT 16-MAY-2001
LOCUS AR124185
DEFINITION Sequence 11 from patent US 6171856.
ACCESSION AR124185
VERSION AR124185.1 GI:14109546
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 4062)
AUTHORS Thigpen, A., Homeliet, H.-E., Newgard, C.B., Unger, R.H., Shimabukuro, M., Chen, G., Rhodes, C.J., Hugl, S.R. and Cousin, S. Methods and compositions relating to no-mediated cytotoxicity Patent: US 6171856-A 11 09-JAN-2001;
FEATURES
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ORIGIN
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Matches 4031; Conservative 0; Mismatches 13; Indels 0; Gaps 0;
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OY	2862	TTCGCCCTCGTGGGGTGTCTGCTGGCTTCGTGCTTTTCCAGCTCCCATTCGTAAAGCCC	2921
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OY	3462	CGCATGGCCCGGAGATGTGGCCACACCTGTAAGAGCTGGTGGCTGCGACAGCTGAATTG	3521
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OY	4002	TGTGATTTTAACTGCTGTGTACAGTATTTTATGCTGTATTTAAAAAACATCAAC	4061
Db	3901	TGTGATTTTAACTGCTGTGTACAGTATTTTATGCTGTATTTAAAAAACATCAAC	3960
OY	4062	CAGTGTGTCCCGACATGGCCACTTGGGTCTTCCCTGTATGATTCCTGTAGSAGATAATTA	4121
Db	3961	CAGTGTGTCCCGACATGGCCACTTGGGTCTTCCCTGTATGATTCCTGTAGSAGATAATTA	4020
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DEFINITION	Human inducible nitric oxide synthase (NOS) mRNA, complete cds.	
ACCESSION	J31511	
VERSION	U31511.1	
KEYWORDS	GI:951320	
SOURCE	Homo sapiens. Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	
ORGANISM	Park,C.S., Park,R. and Krishna,G. Constitutive expression and structural diversity of inducible Life Sci. 59 (3), 219-225 (1996)	
REFERENCE	1 (bases 1 to 4062) 2 (bases 1 to 4062) Park,C., Gianotti,C., Park,R. and Krishna,G. Submitted (11-JUL-1995) Chang-Shin Park, Lab. of Molecular Immunology, NHLBI, 9000 Rockville Pike, Bethesda, MD 20892-1760, USA	
JOURNAL	MEDLINE PUBMED REFERENCES	
AUTHORS	Journal	
TITLE		
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polya_site

4047

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BASE COUNT 966 a 1178 c 1099 g 819 t

ORIGIN

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Matches 4031; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

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RESULT 9
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DEFINITION Sequence 3 from Patent WO0078946.
ACCESSION AX067222
VERSION AX067222.1 GI:12544879
KEYWORDS
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
REFERENCE 1 (bases 1 to 4150)
AUTHORS Kellier, E.T., Gravenstein, S. and Hall, D.M.
TITLE Treatment of viral influenza with antisense oligonucleotides
JOURNAL Patent: WO 0078946-A 3 28-DEC-2000;
Eastern Virginia Medical School (US)
LOCATION/Organism
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ORIGIN
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Best Local Similarity 99.6%; Pred. No. 0;
Matches 4107; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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QY 121 AGCCAGCTGCAAGCCCAAGTGAAGAACATCTGAGCTCAATCCAGTAAGTACATA 180
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QY 301 CCTGTGCACTCTGAGTGCAGTGAACAGATGACCTTCAGATCAACCTCAGCAGC 360
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QY 361 AGCAGATGATGCTCCGCGAGCCCTGCTGAGAGAGCGGAAAGATCTCCAGATCTCG 420
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RESULT 10

AF068236 4150 bp mRNA linear PRI 07-JUN-1998

LOCUS Homo sapiens inducible nitric oxide synthase (NOS) mRNA, complete cds.

DEFINITION AF068236 AF068236.1 GI:3192916

ACCESSION AF068236

VERSION AF068236.1

KEYWORDS Homo sapiens.

SOURCE Homo sapiens.

ORGANISM Homo sapiens.

REFERENCE 1 (bases 1 to 4150)

AUTHORS Luss, H., Li, R.-K., Shapiro, R.A., Tseng, E., McGowan, F.X., Yoneyama, T., Hatakeyama, K., Geller, D.A., Mickle, D.A.G., Simmons, R.L. and Billiar, T.R.

TITLE Dedifferentiated human ventricular cardiac myocytes express inducible nitric oxide synthase mRNA but not protein in response to IL-1, TNF, IFN-gamma, and LPS

JOURNAL J. Mol. Cell. Cardiol. 29 (4), 1153-1165 (1997)

PubMed 97304504

REFERENCE 2 (bases 1 to 4150)

AUTHORS Luss, H., Li, R.-K., Shapiro, R.A., Tseng, E., McGowan, F.X., Yoneyama, T., Hatakeyama, K., Geller, D.A., Mickle, D.A.G., Simmons, R.L. and Billiar, T.R.

TITLE Direct Submission

JOURNAL Submitted (26-MAY-1998) Pharmacology, Westf. Wilhelms-Univ., Domagast. 12, Munster D-48149, Germany

FEATURES

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Location/Qualifiers

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235. .3696

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BASE COUNT 968 a 1211 c 1125 g 846 t

ORIGIN

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Best Local Similarity 99.6%; Pred. No. 0;

Matches 4107; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

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QY 61 AGTTCTCAAGCAGACAGTCTTCTGCTTGTGATGCTGCTTACCCGGGGAGCAGTGC 120

Db 89 AAGTCTCAAGCAGACAGTCTTCTGCTTGTGATGCTGCTTACCCGGGGAGCAGTGC 148

QY 121 AGCCAGCTGCAAGCCCAACAGAGTAAGAACATCTGAGTCAATCCAGATTAAGTACATTA 180

Db 149 AGCCAGCTGCAAGCCCAACAGAGTAAGAACATCTGAGTCAATCCAGATTAAGTACATTA 208

QY 181 GTGACCTGCTTTGTAAAGCCATAGATGCTGCTTGTGAAATTTCTGTCAAGACCA 240

Db 209 GTGACCTGCTTTGTAAAGCCATAGATGCTGCTTGTGAAATTTCTGTCAAGACCA 268

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QY 361 AGCAGATAGTCCCGGCGCCCTGCTGAGAGGGAAGAAAGTCCAGAAATCTGAG 420

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RESULT 11
 AX067221

LOCUS AX067221 3946 bp DNA linear PAT 24-JAN-2001
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 VERSION AX067221.1 GI:12544878
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 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 REFERENCE 1 (bases 1 to 3946)
 AUTHORS Keller, E.T., Gravenstein, S. and Hall, D.M.
 TITLE Treatment of viral influenza with antisense oligonucleotides
 JOURNAL Patent: WO 0078946-A 2 28-DEC-2000;
 Eastern Virginia Medical School (US)
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RESULT 12
 HS020141

LOCUS HSU20141 3946 bp mRNA linear PRI 12-AUG-1995
 DEFINITION Human Inducible nitric oxide synthase mRNA, complete cds.
 ACCESSION U20141
 VERSION U20141.1 GI:687680
 KEYWORDS
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 Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 REFERENCE 1 (bases 1 to 3946)
 AUTHORS Guo, F.H., De Raev, H.R., Rice, T.W., Stuehr, D.J., Thunnissen, F.B.
 and Erzurum, S.C.
 TITLE Continuous nitric oxide synthesis by inducible nitric oxide
 synthase in normal human airway epithelium in vivo
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 92 (17), 7809-7813 (1995)
 MEDLINE 95372368
 PUBMED 7544004
 REFERENCE 2 (bases 1 to 3946)
 AUTHORS Erzurum, S.C.
 TITLE Direct Submission
 JOURNAL Submitted (20-JAN-1995) Serpil C. Erzurum, Pulmonary & Critical
 Care Medicine, Cleveland Clinic Foundation, 9500 Euclid Avenue,
 Cleveland, OH 44195, USA
 FEATURES
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RESULT 13
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HUMTMONOS 3963 bp mRNA linear PRI 04-OCT-2001
Human mRNA for inducible type of nitric oxide synthase, complete
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VERSION
D26525.1 GI:559326
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Inducible type of nitric oxide synthase; cytokine-related.
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1 (bases 1 to 3963)
Hokari,A., Zenitaya,M. and Esunai,H.
Cloning and functional expression of human inducible nitric oxide
synthase (NOS) cDNA from a glioblastoma cell line A-172
J Biochem. 116 (3), 575-581 (1994)
JOURNAL
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2 (bases 1 to 3963)
Hokari,A.
Direct Submussion
Submitted (18-JAN-1994) Atsushi Hokari, Jikei University School of
Medicine, Tokyo, Department of Internal medicine, Division of
Gastroenterology and Hepatology, 3-25-8 Nishishinbashi, Minato,
Tokyo 105-0003, Japan (E-mail:hokari.a@jikei.ac.jp,
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QY	1153	CTGAGCTCTTGAATTCACCTGACCTTGTGCTTGAAGTGGCCATGGAATCCCAAT	1212
DB	961	CTGAGCTCTTGAATTCACCTGACCTTGTGCTTGAAGTGGCCATGGAATCCCAAT	1020
QY	1213	ACGAGTGGTTTGGGAACTGAGAGTAAAGTGTAGCGCTGCTGCAATGCAACATGTC	1272
DB	1021	ACGAGTGGTTTGGGAACTGAGAGTAAAGTGTAGCGCTGCTGCAATGCAACATGTC	1080
QY	1273	TGCTTGAAGTGGGCGGCTGAGTCCCAAGGCTGCCCTTAATGTGCTGTACATGGGCA	1332
DB	1081	TGCTTGAAGTGGGCGGCTGAGTCCCAAGGCTGCCCTTAATGTGCTGTACATGGGCA	1140
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QY	1513	ACCACTGGCTGCAAGATCTTCATGAAATGATGCAAGATGAAATACCGGTTCCCGTGGG	1572
DB	1321	ACCACTGGCTGCAAGATCTTCATGAAATGATGCAAGATGAAATACCGGTTCCCGTGGG	1380
QY	1573	GCTGCGCGGAGATGATTTGGTGTGCTCCCTCCCATGCTGGGAGATACCCCGGTGT	1632
DB	1381	GCTGCGCGGAGATGATTTGGTGTGCTCCCTCCCATGCTGGGAGATACCCCGGTGT	1440
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DB	1441	TTTCAAGAGAGATGCTAAGTACGTCTGCTCCCTTCTCACTCTCTCACTGAGTGAAGGCT	1500
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DB	1501	GGAAGACCAATGCTTGGCAGAGACGAGAGAGCGGACCCAAAGAGAGAGATTCATTGA	1560
QY	1753	AAGTCTTGATCAAGAGCTGTCTCTTTGGCTGTATGCTGATGGCAAGCAATGGCGTCCC	1812
DB	1561	AAGTCTTGATCAAGAGCTGTCTCTTTGGCTGTATGCTGATGGCAAGCAATGGCGTCCC	1620

QY	1813	GAGCAGAGTACACATCTCTTTGGACAGAGACAGAAAAATCAAGGGCGTGGGCTGGG	1872
Db	1621	GAGTCAGAGTACACATCTCTTTGGACAGAGACAGAAAAATCAAGGGCGTGGGCTGGG	1680
QY	1873	ACCTGGGGGCTATTCACCTGTGGCTTCAACCCCAAGTGTCTGCATGAATAGTACA	1932
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QY	1933	GGCTGAGCTCCTTGAGAGAGAAAGGCTCTCTTGGTGTGTACAGATACCTTGGGAATG	1992
Db	1741	GGCTGAGCTCCTTGAGAGAGAAAGGCTCTCTTGGTGTGTACAGATACCTTGGGAATG	1800
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QY	2173	TGGGAGAGGGGATGAGCTCAGTGGSCAGAGAGAGGCTTCCGACGTGGGCGCTGAA	2232
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QY	2473	AACTCTCTGTGAGATGGCCAAAGCTTGAATCTACTGCCGGGGGAGACCTTGGGGTTT	2532
Db	2281	AACTCTCTGTGAGATGGCCAAAGCTTGAATCTACTGCCGGGGGAGACCTTGGGGTTT	2340
QY	2533	GGCCAGGGAACAGCGGGCCCTGGTCCAAAGCATCTCTGGAGGAGTGGTATGGCCCCA	2592
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 REFERENCE 1 (bases 1 to 3855)
 Maier R., Bilbe G., Rediske J. and Lotz M.
 Inducible nitric oxide synthase from human articular chondrocytes:
 cDNA cloning and analysis of mRNA expression
 Biochim. Biophys. Acta 1208 (1), 145-150 (1994)
 PUBMED 94368816
 REFERENCE 2 (bases 1 to 3855)
 Maier R.
 Direct Submission
 Submitted (28-JAN-1994) Rainer Maier, Medicine, University of
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 USA

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3'UTR
 BASE COUNT 894 a 1136 c 1067 g 758 t
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 Query Match SLENSAL"
 Best Local Similarity 99.6%; Score 3039; DB 9; Length 3855;
 Matches 3839; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Search completed: March 14, 2003, 13:16:08
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